
CONSERVATION ELEMENT
of the
THOUSAND OAKS GENERAL PLAN

City of Thousand Oaks
Department of Planning and Community Development
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This document is a comprehensive revision of the Conservation Element adopted in June, 1972.

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PREFACE

This Conservation Element is based upon the premise that the existing natural environment possesses its own inherent values and qualities that should be preserved. Most importantly, within these ecosystems lay the blueprints for different patterns of life that have evolved apart from the pervasive influences of man and modern technology.

In the context of local planning, conservation is a positive action to assure that as buildout of the community continues to occur as envisioned by the General Plan, related physiographic, hydrological, biological and cultural resources are not lost or permanently altered to the detriment of the natural environment that we all share and enjoy. While in principle, these practices imply a set of constraints with respect to human activities affect these resources both directly and indirectly, they also recognize the capacity of the environment to tolerate or support urban land uses. Correspondingly, the role of the Conservation Element is to help identify these limitations and opportunities and define various policies and implementation measures by which these natural resources can be conserved within the Planning Area.

State Planning Law requires the Conservation Element to address "the conservation, development, and utilization of natural resources, including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources." Although no harbors, fisheries or significant mineral resources exist within the Planning Area, this Element inventories and describes several other equally important resources including native plant and animal communities, natural landform features, scenic viewsheds, and archaeological and historic sites that are potentially affected by urban land uses and associated development.

CHAPTER 1

INTRODUCTION

The Thousand Oaks Planning Area encompasses a topographically diverse landscape of mountains, hills, valleys and canyons that supports a variety of natural vegetation types, including many sensitive plant and animal species. In addition, the Conejo Valley has a rich cultural heritage, including numerous archaeological and historic sites. In combination, these resources not only enhance the community's sense of spaciousness and semi-rural character, but significantly contribute to the overall quality of the environment.

While many of these resources have already been permanently preserved as a part of the Planning Area's extensive natural open space system, others fall under the jurisdiction of other public agencies, or exist within remaining vacant parcels of land that are under private ownership. The purpose of this Element is to describe the general characteristics of these natural resources and identify appropriate policies and implementation measures that will be used to guide future development, as envisioned by the Land Use Element of the General Plan, in a sensitive manner that will afford the long term conservation and protection of these vital resources for future generations.

The Conservation Element includes several figures that depict the local distribution of these resources, and the appendices contain a comprehensive listing of plant and animal species known to occur within the Planning Area.

CHAPTER 2

RESOURCE DESCRIPTIONS, CONSERVATION POLICIES AND IMPLEMENTATION MEASURES

This Chapter is divided into the following sections, relating to specific resource categories present within the Planning Area:

- Section I **Physiography**, relating to both the scenic and physical characteristics of local landform features.
- Section II **Hydrology**, relating to the drainage characteristics of the surrounding tributary watershed.
- Section III **Biological Resources**, which relates to native plant and animal communities and individual species known to inhabit, or make use of existing habitats.
- Section IV **Cultural Resources**, relating to the presence of previously identified and recorded archaeological and historic resources.

Section I- Physiography

A. Scenic Resources

The scenic qualities of the Conejo Valley have been acknowledged by residents and visitors for many years. Framed by steeply sloping hillside terrain and major ridgelines of the Simi Hills, Conejo Peak and Santa Monica Mountains, the Valley is a distinctive and picturesque landscape, characterized by broad open vistas of natural open space, traversed by creeks, and dotted with prominent knolls and native oak woodlands. Protection of these natural viewshed features has been formally embodied in the City's General Plan, including its Open Space Element, Conservation Element, Scenic Highways Element, and in ordinances and resolutions concerning the preservation and enhancement of the Valley's unique scenic attributes.

Due to the community's regard for its natural setting, development in Thousand Oaks is widely

visible, but usually does not dominate the major natural landscape features. It's general appearance is that of a community nestled within a ring of open space. Thousand Oaks is distinguished by its oak trees, and the prominence of knolls, ridges and hills in a largely natural state. There are relatively few visually prominent buildings. The City's image is a self-sufficient, planned suburban community with a consciously maintained semi-rural character. This image is perpetuated by prudent land use practices that result in the preservation of open space while combining residential, commercial and industrial components within the fabric of the City's General Plan.

The City has been successful in protecting the scenic resources of the Conejo Valley in several ways. For example, environmental documents prepared for all major developments evaluate the project's visual impact from core areas of the City, as well as from designated scenic highway corridors and parklands. This is accomplished by utilizing actual site photos and computer-assisted drawing programs to prepare composite photo-overlay exhibits that accurately depict how the finished project will appear from selected viewshed perspectives. Most importantly, the City has adopted specific site planning guidelines and development policies that effectively serve to minimize any potentially adverse visual impacts and help retain the semi-rural appearance of the community. These policies encourage the location of buildings on relatively flat land between knolls or on moderate slopes, blending with the natural surroundings, while avoiding the placement of structures on ridgelines, conspicuous hilltops or steep hillsides where silhouetting or extensive grading would be necessary.

Policy

CO-1 Future development within Thousand Oaks should reflect a sensitivity to its physical setting and natural scenic resources.

Implementation Measures

- Ensure that development occurring within the view corridors of the Route 101 and 23 Freeways conform with the Freeway Corridor Design Guidelines (Res. 91-172).
- Ensure that development adjacent to designated scenic highways is consistent with the Scenic Highways Element of the General Plan.
- Ensure that development proposed within defined gateway areas (Res. 93-152), conforms with the City's planning policies and guidelines for City Gateways.

- Work toward the installation of landscaping within the Route 101 and Route 23 Freeway medians and parkways.
- Utilize the City's Protected Ridgeline Overlay zone, Open Space zone, Hillside Planned Development zone and Grading Ordinance to protect the City's hillsides and ridgelines.
- Continue to implement the City's Architectural Design Review Guidelines to insure that the special scenic resources and identity of Thousand Oaks are retained and enhanced.

B. Landform Features

The Conejo Valley, which encompasses most of the Thousand Oaks Planning Area, is flanked by two major east-west trending mountain ranges - the Santa Monica Mountains to the south and west and the Simi Hills to the north and east. Situated above the Oxnard Plain and separated by the Conejo grade, this upland area generally ranges in elevation from 600-900 feet above sea level, with Conejo Peak, Simi Peak and the Mountclef Ridge rising another 1,000-1,600 feet above the valley floor.

Other significant landform features include numerous prominent knolls, hills, rocky outcroppings and lower intervening ridgelines, and a system of deeply entrenched stream channels and barrancas. From a topographic standpoint, most notable among these features is the Conejo Canyons area through which the bulk of stormwater generated within the watershed eventually flows. This area is characterized by very steep, rugged, hillside and mountainous terrain that descends rapidly northward toward the Santa Rosa Valley. Please refer to Figure 1.

An important goal of the City's General Plan is to "enhance and preserve the spaciousness and attractiveness of the Conejo Valley in accommodating future development." Because of this commitment, and with the strong support of the community, the City Council has moved forward to enact and enforce a comprehensive set of local ordinances that have served to limit the height of manufactured cut and fill slopes, encourage the clustering of development in areas with less steeply sloping hillside terrain, and minimize significant modifications to prominent ridgelines and other related landform features. In addition, the Council has adopted specific policies recommended in the Conejo Canyons Study (1979), with respect to the long term management and protection of the scenic qualities associated with this unique landform feature.

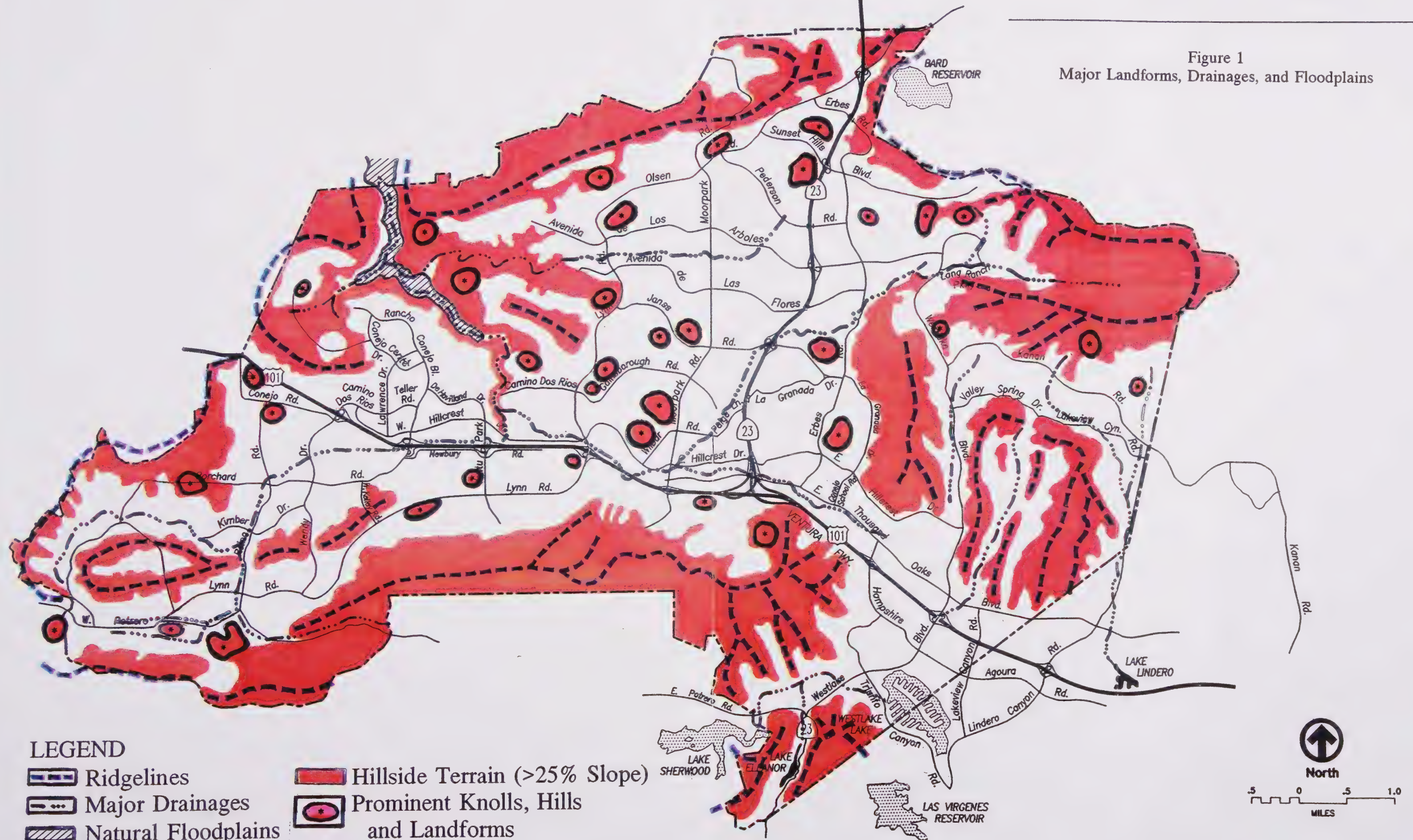
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Figure 1
Major Landforms, Drainages, and Floodplains



In keeping with these adopted policies and regulations, the following natural landform features have been classified in terms of their inherent suitability for development:

Flat Land: For the purpose of this Element, flat land is defined as land with a natural slope less than 10 percent. Approximately 28 percent of the 60-square mile Planning Area is classified as flat land. It is suited to many types of land uses ranging from the most intensive urban uses to recreation and agriculture. Natural limitations on the suitability of individual sites would be based upon soil characteristics such as shrink-swell (expansion) potential, load-bearing ability, susceptibility to erosion and seismic hazard. Such geologic problems potentially associated with construction on flat land can be avoided or mitigated by proper geologic and soils investigation before development. A more detailed examination of soils and geology in Thousand Oaks is included in the Safety Element of the General Plan.

Moderately Sloping Hillides: Moderately sloping hillides are defined as land with natural slope between 10% and 25%. They are suited to less intensive land development patterns than those appropriate to flat land.

Steeply Sloping Hillides: Land over 25% natural slope is classified as steeply sloping for purposes of the General Plan. Approximately 42% of the Planning Area is so classified. It is intrinsically suited to few urban uses, primarily for reasons of soil erosion control and preservation of the aesthetic quality of the landforms. Drainage is also more rapid and the role of ground cover in retaining the soil and slowing runoff is more critical. Landscaping is more difficult to maintain on steep slopes. Open space, certain recreation facilities such as trail systems, and very low density residential development are most appropriate for steep hillside terrain.

Ridgelines: The natural ridgelines within the Planning Area are perceived by residents as important assets worthy of preservation. This has been reaffirmed over time in community attitude surveys, documented in the City's Ridgeline Study and embodied in the Protected Ridgeline (PR) Overlay Zone ordinance.

Policies

- CO-2 *General Plan policies, zoning, development guidelines, architectural review standards and other regulations are appropriate for controlling development on flat land.*
- CO-3 *The steeper the slope, the greater the proportion of the land that should remain in an undisturbed, undeveloped state, as outlined in the City's Hillside Planned Development (HPD) Ordinance.*

- CO-4 *The most suitable forms of development for steeply sloping terrain are recreation areas, open space and very low density residential which can be developed in natural pockets of land less than 25 percent slope.*
- CO-5 *Hillside development criteria should promote high standards and encourage site design, grading and architecture appropriate to hillside terrain.*
- CO-6 *There should be no grading in slopes over 25 percent natural grade and the vertical height of manufactured slopes should be no higher than 25 feet.*

Implementation Measures

- Properties located on ridgelines should be considered for application of the Protected Ridgeline Overlay Zone.
- The City's Grading Ordinance provides standards for the height of manufactured slopes and limitations on grading in areas of 25 percent natural grade.
- Properties located in areas greater than 10 percent slope should be considered for HPD zoning, as provided in the HPD Ordinance.

Section II - Hydrology

C. Lakes and Lakeshores

There are two man-made lakes in Thousand Oaks - Westlake Lake, which is privately owned and Lake Eleanor, which is owned by the Conejo Open Space Conservation Agency (COSCA). Lakes and their shores are suitable to a variety of uses, including natural habitat, resource conservation, recreation, and appropriate residential, commercial and institutional lakeshore development. The most important factors that determine the suitability of a particular land use for a lakefront location are (1) the potential for water pollution and (2) the effect of the land use upon the scenic amenity of the lake. Sufficient building setbacks not only preserve significant landscape features and natural landforms associated with lakes, but also serve to minimize indirect impacts to resident and migratory wildlife that utilize these habitats.

In terms of controlling pollution, bio-filtration is a relatively new concept that utilizes various types of herbaceous vegetation planted in shallow earthen-bottomed basins to filter out contaminants normally found in urban runoff such as oil, grease, soap, fertilizers and pesticides. Once these chemical substances become trapped, they naturally break down over time into harmless organic compounds that actually stimulate plant growth and increase their overall effectiveness. Since most of the pollution is carried by low flow nuisance water, biofiltration systems would be beneficial if incorporated in the landscape and drainage design of development projects that are tributary to both lakes.

Policies - General

CO-7 *Regulate development activities in the watershed areas of the two lakes, in order to avoid or minimize pollution of the lakes.*

Implementation Measure - General

- Low flow, bio-filtration basins, or other mitigation measures that are consistent with the City's National Pollutant Discharge Elimination System (NPDES) standards for new development, should be integrated in the design of all industrial, commercial and residential projects that contribute runoff to either Westlake Lake or Lake Eleanor.

Policies - Lake Eleanor

CO-8 *Continue to preserve access to the lake and its shoreline for migratory or resident wildlife.*

CO-9 *Preserve identified sensitive plant and animal communities, archaeological sites and natural/scenic features of Lake Eleanor, its shoreline and surrounding environment.*

Implementation Measures - Lake Eleanor

- Future use of the lake and its surrounding environment should be primarily oriented toward passive recreational use, such as hiking, picnicking, and nature study.
- To retard siltation and extend the life of Lake Eleanor, a series of desiltation basins

should be constructed along the creekbed which feeds the lake from the south.

- - In the event that any modifications to Highway 23 (Decker Canyon Road) are proposed south of Potrero Road, the City should work with CalTrans to avoid any significant impacts to Lake Eleanor.

D. Streams and Creeks

The Conejo Valley encompasses a drainage area of approximately 60 square miles. The major drainage course within the Planning Area is the Arroyo Conejo, including its principal tributary, the South Branch, which drains about 45 square miles, bounded by the ridgelines of the Santa Monica Mountains to the south, Mountclef Ridge to the north, Conejo Mountain to the west and the Simi Hills to the east. Several smaller streams, including Wildwood Creek, Lang Creek, and Conejo Mountain Creek, are also tributary to the Arroyo Conejo. The Arroyo Conejo flows to the Santa Rosa Valley northwest of the Planning Area. From that point it continues across the Oxnard Plain via Conejo and Calleguas Creeks, ultimately emptying into Mugu Lagoon at the edge of the Pacific Ocean.

Two other watercourses, Lindero and Potrero Creek, drain approximately 15 square miles of watershed in the southeastern quadrant of the Conejo Valley. These creeks are tributary to Triunfo Creek and Malibu Creek, which empties into the Pacific Ocean about nine miles south of the Planning Area. Please refer to Figure 1.

As the Planning Area has urbanized, many tributary drainages are retaining running water for longer periods of time, due to the additional nuisance water (e.g., irrigation) runoff.

Approximately 47% of the land area within the Thousand Oaks Planning Area has been developed. Most of the stream drainages that traverse highly urbanized portions of the community have been extensively modified. Although the City's General Plan has always encouraged their preservation, many of these stream drainages are designated as "red-line" channels and come under the jurisdiction of the Ventura County Flood Control District that determines the appropriate design of any improvements needed to protect the public's health and safety. In the past, such drainages were typically converted to concrete-lined channels, and in other instances, large sections have been eliminated by diverting runoff into underground storm drains. More recently, the application of state and federal regulations that afford protection to riparian and wetland vegetation commonly found in natural stream drainages has resulted in more environmentally sensitive development projects, including restoration and revegetation wherever feasible.

Besides accommodating storm water runoff and serving to recharge groundwater aquifers, streams and creeks also provide important foraging, nesting and breeding habitats for wildlife. Not only do animals depend on streams and creeks for water that is critical to their survival, but they often use them as "movement corridors" between adjacent open space areas since they afford excellent cover. Correspondingly, the biological diversity of the plant and animal communities that inhabit, or in some way utilize, the Arroyo Conejo and its major tributaries is quite extensive. Notable among these species is the southwestern pond turtle, which is classified by the State as a species of "special concern" due to limited distribution within its historic range. Although loss of habitat and pollution have been the principal causes attributed to its decline locally, significant populations continue to thrive in the lower Arroyo Conejo, Wildwood Creek and South Branch drainages.

Because of a combination of factors, including biological sensitivity and susceptibility to erosion and flooding, streams and creeks are considered intrinsically unsuitable for, and intolerant to, urban development, particularly where they occur in steep, narrow barrancas.

Policies

CO-10 Streams and creeks should be preserved as open space and maintained in as natural a state as possible to protect the City's and other downstream communities' water quality, wildlife diversity, native vegetation, and aesthetic value. This will contribute to the regional effort to improve the quality of Calleguas Creek, Malibu Creek and Mugu Lagoon.

CO-11 Degraded sections of streams and creeks should be restored or enhanced as opportunities arise and financial resources become available.

CO-12 Major barrancas should be preserved in a natural state. Appropriate land uses for these natural features include recreation trails and open space.

CO-13 Use of concrete for flood control improvements in natural drainage courses should occur only when no reasonable alternatives can be found that would maintain natural hydrological and ecological functions.

Implementation Measures

- Residential projects competing for Development Allotments should be given bonus points for preserving or restoring creeks and streams located on or off-site.

- All development projects should be reviewed to ensure preservation of streams and creeks onsite, as long as there is no threat to public safety.
- All new developments shall comply with standards adopted by the City for minimizing storm water pollution and siltation.
- Erosion and pollution from construction sites will be reduced as the City implements NPDES standards for construction sites.
- Increase monitoring and enforcement of pollution standards for existing commercial and industrial uses, pursuant to the countywide NPDES permit, to reduce storm water pollution.
- Continue public outreach and education programs to help reduce stormwater pollution.

E. Floodplains

Natural floodplains are generally intolerant to urban land uses. As a result, development should be discouraged in these lowland areas that often contain significant wetland and riparian habitats. Land uses that are not affected by flooding and do not impede runoff are appropriate in floodplains. Such uses include parks, playfields, golf courses, hiking and riding trails, and natural open space. Within the Thousand Oaks Planning Area, the potential for flooding exists to a limited degree as the result of the encroachment of urban development into the natural floodplains of portions of the South Branch Arroyo Conejo and Lang Creeks. These flood prone areas are graphically depicted in a series of maps prepared by the Federal Emergency Management Agency (FEMA), which are kept on file in the Public Works Department. The only entirely natural floodplain remaining within the Planning Area is located adjacent to the lower Arroyo Conejo in the Hill Canyons area. This area is designated as a golf course reserve by the applicable Specific Plan (Rancho Conejo). Please refer to Figure 1.

Policies

CO-14 Protect remaining floodplains in order to help retain stormwater runoff from tributary watersheds and reduce the potential for periodic flooding within downstream reaches of the Arroyo Conejo and Calleguas Creek.

Implementation Measure

- Natural floodplains and any remaining areas within a 100-year flood-zone should be reserved for open space and limited recreational uses that are compatible with public safety considerations.

F. Stormwater Retention and Debris Basins

Stormwater retention and debris basins are often constructed in natural drainages channels and floodplains to effectively control runoff, reduce erosion and prevent sedimentation further downstream, impacting the resources addressed in the two immediately preceding sub-chapters.

In Thousand Oaks, several large basins already exist, or are proposed for construction on the Arroyo Conejo, Conejo Mountain, Lindero, Lang and Potrero Creek drainages. As urban development continues to occur, additional basins will likely be needed within these same tributary watersheds, including a master stormwater retention facility located somewhere in the lower Conejo Canyons area. Since the Ventura County Flood Control District has jurisdiction over the design and approval of such structures, it is important that the City work closely with this agency to minimize any potentially adverse environmental impacts wherever possible. In some cases, opportunities also exist for multi-use recreational activities where sufficient land area is available and conflicts with wildlife can be avoided.

Policies

CO-15 Every effort shall be made to design and construct stormwater retention and debris basins to minimize any potentially adverse impacts to significant landform features, aquatic resources, and associated native plant and animal communities.

CO-16 Wherever appropriate, consideration shall also be given to allowing trailhead access and other passive and active recreational uses, including playfields.

Implementation Measures

- Contour grading and landscaping with native plant species shall be utilized in stormwater retention and debris basin design.
- Biologically significant plant and animal habitats should be preserved wherever

feasible.

- Where avoidance of mature specimen trees is not feasible, such trees should be considered candidates for transplanting or replacement.
- Whenever such basins are located adjacent to or near natural open space, unrestricted access by wildlife should be incorporated in the project design.
- All proposed stormwater retention and debris basin projects shall be reviewed by the City, the Conejo Recreation and Park District and the Conejo Open Space Conservation Agency in order to determine the potential for passive or active recreational uses that could be incorporated in the overall design.

G. Water Supply, Reclamation and Conservation

Water Supply

Thousand Oaks is dependent upon imported water for most of its domestic, commercial and industrial needs. Imported water is delivered to the City and other water purveyors by the Calleguas Municipal Water District (CMWD) from the Metropolitan Water District of Southern California (MWD). The three major water purveyors serving the Planning Area are California-American Water Company, California Water Service Company, and the City of Thousand Oaks Water Department.

Under normal water supply conditions, the MWD supplies water to the CMWD according to demand. The MWD's future water system demand is based on a population forecast provided by the Southern California Association of Governments (SCAG) in its Growth Management Plan, which incorporates local projections. The CMWD has a capital improvement program to enhance system reliability for existing users and to accommodate new growth. Through its capital improvement program, the CMWD is committed to constructing local storage and additional importation and reclaimed water facilities in an effort to drought-proof its service area and enhance the reliability of its service area's water supply.

In a joint venture, the CMWD and the MWD are working on a large-scale importation and subsurface water storage project in Ventura County, known as the "West Valley Project," which would provide a measure of supply reliability for the entire CMWD service area. This project involves construction of a second MWD supply pipeline to the CMWD and storage of up to

300,000 acre feet of imported water in the North Las Posas Groundwater Basin. When available, excess imported water would be injected into the basin. Subsequently, if deliveries from the MWD are curtailed or interrupted by drought or pipeline outages, the water could be recovered from the groundwater basin. As a result, the West Valley Project would insulate the service area from future supply problems by reducing the District's dependence upon imported state water.

The CMWD plans to develop this project over the next 10 years. To date, one aquifer storage and recovery well has been installed and four others are currently being drilled. Thirty wells are ultimately planned within the West Valley Project.

Water Reclamation

In addition, CMWD is pursuing the construction of reclaimed water projects on the Oxnard Plain and in the Conejo and Simi Valleys. These ventures could ultimately yield a substantial portion of the District's current annual deliveries. The recycled water will be used primarily for irrigation purposes. As a result, an equivalent amount of potable water will become available for domestic, commercial and industrial usage, reducing the need to acquire additional imported potable water supplies.

One example is the conejo Creek Diversion Project, a cooperative effort among the City of Thousand Oaks, CMWD, Camrosa Water District, and Pleasant Valley County Water District. It involves the diversion of reclaimed wastewater from the City's Hill Canyon Wastewater Treatment Plant discharged into Conejo Creek. The diverted water would be transferred to Camrosa and Pleasant Valley County Water District for irrigation of farmland and other acceptable uses.

Water Conservation

The City has prepared a Water Conservation Plan, pursuant to State Legislation (AB 797). The purpose of the plan, which is updated every five years, is to document past, present and future water conservation efforts by the City. As a result, various water conservation measures are being implemented:

- (1) The City created a staff position to help manage water resources by developing water conservation programs.
- (2) The City has cooperated with the County of Ventura's Water Conservation Program, creating a unified effort to address water supply problems in the County.
- (3) The City Council has adopted, (a) Resolution 90-159 calling for Citywide

voluntary water conservation, (b) Ordinance 1087-NS for mandatory standby water conservation measures that can be implemented during periods of water supply deficiencies, (c) Ordinance 1069-NS amending the Municipal Code requiring that water saving devices be installed in all new developments and, (d) Resolution 90-20 establishing guidelines and standards for landscape planting and irrigation plans for all new and remodeled developments.

Policies

CO-17 Continue to ensure the provision of water in quantities sufficient to satisfy current and projected demand.

CO-18 Continue to encourage water conservation measures in new and existing developments.

CO-19 Encourage the use of reclaimed water for irrigation purposes.

CO-20 Continue to develop and utilize groundwater resources to reduce the Planning Area's dependence upon imported water.

Implementation Measures

- Continue to implement and periodically update the City's Water Conservation Plan that contains measures to reduce water use under normal and short term deficiency conditions.
- Continue to implement the City's Landscape Review Criteria, which require the use of low-maintenance, drought-tolerant landscaping in all public and private developments.
- Apply standard water conservation conditions of approval to new developments.
- Encourage the use of pervious materials wherever paving is proposed, to promote and facilitate groundwater recharge.

Section III - Biological Resources

H. Native Plant Communities

Naturally occurring assemblages of plants, called native plant communities, tend to grow together as a response to several environmental factors such as soil type, slope, exposure and availability of sub-surface moisture, etc. While each individual plant species has unique requirements that account for its presence or absence within a general area, considerable overlap in plant distribution often occurs due to the variability of environmental factors and other related habitat conditions. As a result, these communities sometimes merge along relatively indiscreet borders to form mosaic patterns of different vegetation types and varying species composition.

In a very general sense, the Thousand Oaks Planning Area contains six native plant communities which are representative of the larger Santa Monica Mountains region. Refer to Biological Resources Map, Figure 2. These communities are briefly discussed below. A complete flora of the Thousand Oaks Planning Area is provided in Appendix A.

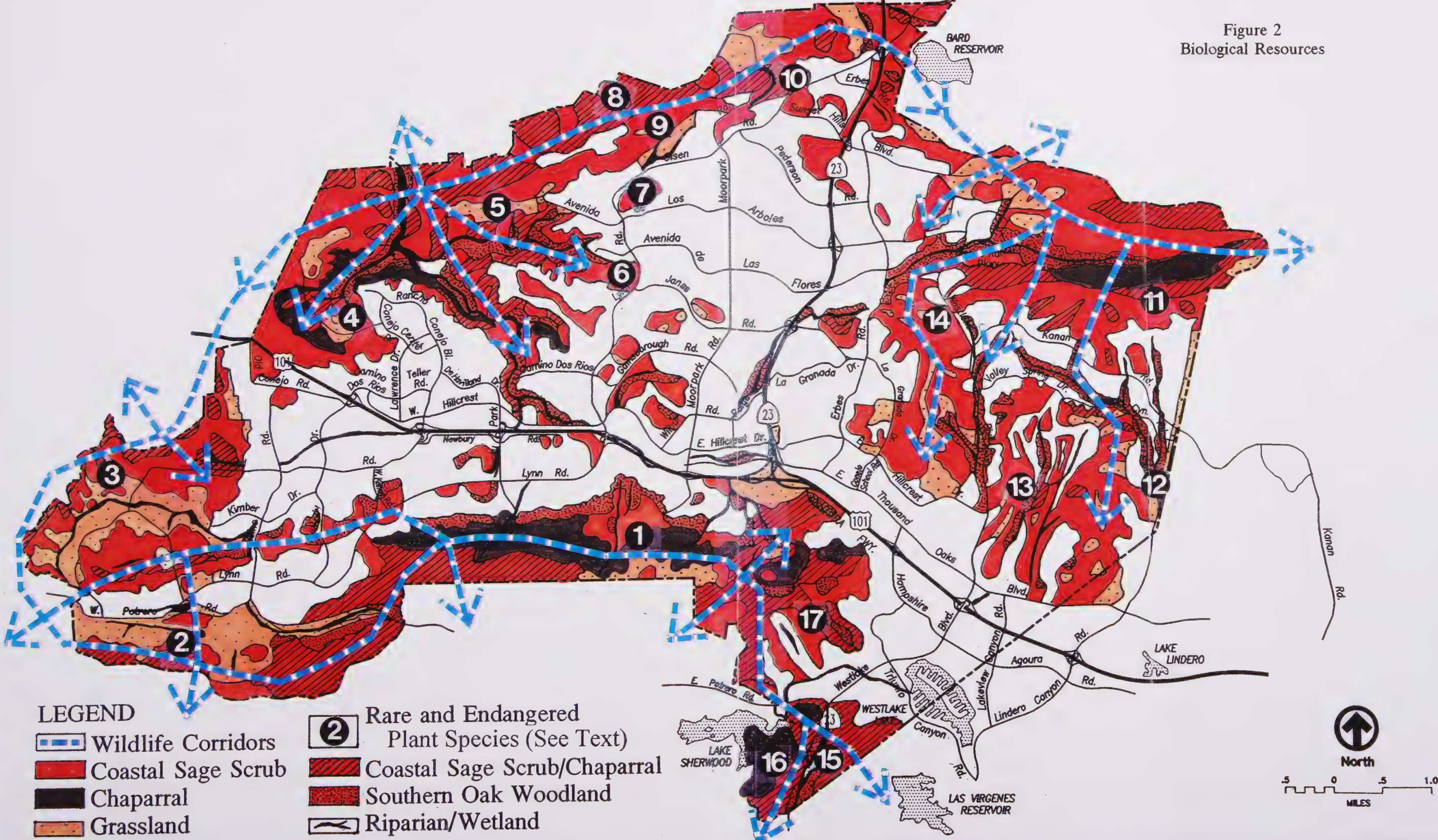
Grasslands: Grasslands are characterized by low annual herbs such as black mustard, wild oats and brome grass. In less disturbed areas native grasses, such as purple needle grass, and native bulbs, such as Catalina mariposa lily, may become quite common. This plant community is located primarily in heavy clay soils on gently rolling hills and valleys throughout the Planning Area.

Grasslands have been subject to many man-made constraints and pressures including competition from introduced non-native species, agricultural conversion and urbanization. In areas where the grasslands have remained, this has resulted in the replacement of the native bunch grasses with introduced non-native grasses. This community is becoming increasingly scarce in Southern California.

Chaparral: Chaparral, which is probably the most characteristic vegetation type of Southern California, is found mostly on steep slopes with shallow soils. This plant community consists of a variety of stiff, woody shrubs and usually occurs at higher elevation than the coastal sage scrub zone. Common chaparral plants include chamise, several species of ceanothus, laurel sumac and mountain mahogany. It is located in the foothills south of the Ventura Freeway and on north-facing slopes along the Mount Clef Ridge, Conejo Canyons, and Simi Hills. It is known as a "fire climax" plant community and has adapted to California's regime of periodic wild fires. Chaparral shrubs provide cover for large animals, serve as a major component in the diet of the mule deer, and produce seeds for birds and small mammals.

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Figure 2
Biological Resources



Coastal Sage Scrub: Along with chaparral, this is the most widespread plant community within undeveloped areas of the Planning Area. It is comprised of small semi-woody shrubs and is sometimes called "soft chaparral" due to the flexibility of the leaves and stems. Typical coastal sage scrub plants include California sagebrush, California sunflower, California buckwheat and purple sage. The coastal sage scrub community is usually found below 1000 feet where it is present as a band surrounding higher mountains below and often inter-grading with chaparral. Three forms of this plant community occur locally - "inland," "sea-bluff succulent," and "maritime." The inland form is by far the most abundant within the Planning Area and is often called inland sage scrub. The maritime form is present along the Conejo Grade and on south-facing slopes of the Broome Ranch. Like chaparral, coastal sage scrub requires periodic fires or it becomes senescent.

The cumulative loss of coastal sage scrub habitat throughout the state has been the focus of considerable concern among biologists. Many of Thousand Oaks' rarest endemic plants are found within this plant community.

Oak Woodland/Oak Savannah: Oak woodland communities occur in canyon bottoms and north-facing hillsides, often as a fairly dense growth of coast live oak with associated species such as poison oak and toyon. Valley oak, on the other hand, usually forms a savannah comprising large widely-spaced trees separated by extensive grasslands. This plant community is present within the Planning Area but in its undisturbed form is limited to small geographical areas. Oak woodlands and savannahs support a wide variety of bird and animal species wherever they occur.

Oak woodlands and savannahs primarily occur in gently rolling foothills and valleys. As a result, urbanization of these areas throughout Southern California has resulted in decline in the range of this once wide-spread plant community. For example, most of the Conejo Valley was once an extensive oak savannah. While the City's Oak Tree Ordinance has enabled many of these historic oaks to be preserved as development took place, the only remaining examples of this natural landscape are within public open space.

Riparian: This plant community is restricted for the most part to perennial streams or springs where there is moisture at or near the surface much of the year. In valleys and canyons where Riparian vegetation naturally occurs, this plant community provides important habitat for wildlife, yet it is diminishing throughout the Santa Monica Mountains region and comprises less than three percent of the Planning Area's remaining natural open space. In Southern California, the majority of remaining riparian woodlands are largely confined to remote inaccessible areas. Urban development and associated flood control projects have been the principal causes for its loss both locally and regionally.

Within the Planning Area, riparian plant communities occur in two general forms: riparian woodland and herbaceous riparian. Riparian woodland consists of an overstory of large deciduous trees such as white alder, California sycamore and Fremont cottonwood with an understory of shrubs such as California wild rose and mule fat. Herbaceous riparian comprises a dense growth of low perennial plants such as iris-leaved rush, sedges and California loosestrife.

Freshwater Marsh: Perhaps the most restricted plant community in the Planning Area, freshwater marsh comprises an accumulation of herbaceous perennial plants generally found wherever water ponds. The best example of freshwater marsh is found along the margins of Lake Eleanor, but it also occurs along slowly moving portions of streams and in the vicinity of livestock ponds. Common plants include cattails, tules and water plantain. Adding to their overall importance, freshwater marshes are utilized as breeding and foraging areas by waterfowl such as cinnamon teal and wading birds such as great blue heron.

I. Wildlife Resources

A variety of resident and migratory wildlife species that are representative of the Santa Monica Mountains region can be found within natural open space areas that have been permanently preserved, as well as remaining undeveloped portions areas. Not only are key habitat resources such as food, cover, and water plentiful throughout these areas on a year-round basis, but rocky outcrops, high peaks, steep hillside and canyon areas combine to provide important undisturbed nesting and breeding opportunities for wildlife. Along with an extensive network of movement corridors that serves to prevent habitat isolation and maintain unrestricted access to these resources, both the diversity and quality of this ecosystem are relatively high.

Examples of the range of wildlife found within the Thousand Oaks area are discussed below. A complete list of wildlife species known to inhabit, or otherwise make use of available habitats located within the Planning Area is included in Appendices B through D.

Reptiles and Amphibians: Reptiles occur throughout natural open space areas and commonly include side-blotched lizards, southern alligator lizards and western fence lizards. A variety of snakes are also present, including gopher snakes, striped racers, Southern Pacific rattlesnakes, common king snakes, ringneck snakes, and western aquatic garter snakes. The southwestern pond turtle, which is actually a reptile and not an amphibian, is a State-listed "species of special concern" and can be found in the Arroyo Conejo and its major tributary drainages. See Appendix B for a list of the reptiles and amphibians of the Thousand Oaks Planning Area.

Several species of amphibians are present in the cool, moist habitats afforded by woodlands and

riparian communities. Amphibians expected to occur include slender salamanders, ensatina salamanders, western toads, and Pacific tree frogs. Toads and tree frogs utilize temporary pond and stream habitats for breeding, and do not require much water for the rest of the year. Fully aquatic forms such as the bullfrog are present along perennial streams and ponds. Another State-listed "species of special concern," the red-legged frog, may also be present in riparian areas, but has not been found in recent surveys.

Birds: The great diversity of bird species found within Thousand Oaks reflects the variety of habitat types available to resident and migratory populations. Local survey records have identified a total of 171 bird species here. These species include breeding birds that nest here but migrate to warmer climates during the winter months, resident species that are present year-round, and migrants that are here only during the fall and winter. Among the most commonly encountered birds within urbanized portions of the City are house sparrows, house finches and Brewer's blackbirds, while several species of warblers, California and rufous-sided towhees, plain titmice, acorn woodpeckers, California quail and red-tailed hawks are more typical of natural open space areas.

Particularly noteworthy are the seventeen (17) species of raptors, or "birds of prey" which can be found here. The following species are known to nest and breed locally: Cooper's hawk, American kestrel, prairie falcon, red-tailed hawk, red-shouldered hawk, golden eagle, great horned owl, barn owl and white-tailed kite. Other raptors that range through the area or become more numerous in the winter months include the turkey vulture, northern harrier, sharp-shinned hawk, ferruginous hawk, merlin, and screech owl. As a whole, raptor population densities within the Santa Monica Mountains region, which includes the Conejo Valley, are considered to be some of the highest in the country. See Appendix C for a list of birds of the Thousand Oaks Planning Area.

Mammals: Mammals that have either been observed or are expected to occur locally include species ranging from small ground dwelling rodents to large carnivores. Resident populations of small to medium-sized mammals such as deer mouse, Pacific kangaroo rat, Audubon cottontail, long-tailed weasel, striped skunk, and raccoon are frequently encountered in and around urban areas, as well as open space. Larger mammals including coyote, grey fox, bobcat, and mule deer are also common inhabitants, but tend to be more restricted in their distribution and primarily occupy larger natural undisturbed habitats. Although locally uncommon, mountain lions are known to have very large territories that include the Santa Susana Mountains, Simi Hills and Santa Monica Mountains and are occasionally seen by hikers or residents bordering the open space system. See Appendix D for a list of mammals of the Thousand Oaks Planning Area.

Policies

- CO-21 The City shall encourage the proper management, conservation and protection of native plant communities throughout the City's Planning Area, including developed areas and remaining undeveloped open space lands.*
- CO-22 Consumptive land uses or practices (e.g., off-road vehicle use, hunting, trapping) that are incompatible with the long-term survival and viability of resident and migratory wildlife populations shall be discouraged.*
- CO-23 Critical wildlife habitat resources such as movement corridors, surface water impoundments, streams and springs should be given special consideration for preservation, restoration or enhancement, in order to maintain the biological productivity and ecological integrity of natural open space areas.*
- CO-24 In order to reduce the potential for devastating wildfires and the resulting damage they cause to both natural ecosystems and urban environments, appropriate fuel management and prescribed burning programs should be conducted on a selective basis, including the periodic monitoring of any potentially adverse effects on animal habitats and air quality.*

Implementation Measures

- The City should support local and regional conservation projects that will have beneficial effects on vegetation and wildlife including the restoration and enhancement of critical habitat resources that have either been degraded or disturbed.
- As part of the environmental review process, continue to review the impact of proposed developments, both within the Planning Area and regionally, on vegetation and wildlife.
- The Ventura County Fire Protection District should work cooperatively with the City to identify and implement necessary fuel management and prescribed burn programs.

J. Wildlife Movement Corridors

It is essential that natural open space not only be preserved and protected, but that these areas are linked together in a way that maintains biodiversity and prevents the loss of sensitive animal species. Commonly called wildlife "movement corridors," such linkages are generally described as routes or paths that can be utilized by animals to gain access to critical foraging, nesting and breeding habitats that are necessary for their survival. As urbanization within the Conejo Valley and nearby communities continues to cause the isolation and fragmentation of habitat, both on a regional and local scale, the need to plan for, and accommodate, a viable network of movement corridors becomes increasingly important.

From a regional standpoint, the most important corridors are those linking the Santa Monica Mountains, Simi Hills and Santa Susana Mountains.

Approximately 13,000 acres (34% of the land area) of natural open space is expected to be preserved within the Planning Area, and an additional 1,300 acres is expected upon full buildout of the Planning Area. Except for a few remaining key parcels of land, most of the urbanized area is surrounded by an extensive inter-connected ring of natural open space that accommodates the unrestricted movements of wildlife. Please refer to Biological Resources Map, Figure 2.

According to a recent report prepared for the Nature Conservancy, however, the U.S. 101 and State Route 23 Freeways are the major barriers to regional wildlife movements between the Santa Susana Mountains, Simi Hills and the Santa Monica Mountains.

Policies

CO-25 Isolation and fragmentation of natural open space areas should be prevented wherever possible.

CO-26 Since natural stream drainages often serve as important movement corridors for wildlife, they should be preserved wherever it is feasible to do so.

CO-27 Urban land uses adjoining natural open space areas should be designed in a manner that is sensitive to the needs of wildlife and avoids or minimizes any potentially adverse impacts to movement corridors.

Implementation Measures

- Acquire additional land identified by the Open Space Element of the General Plan,

in order to complete vital habitat linkages and provide access by wildlife to these resources.

- Continue to cooperate with and assist other public agencies, the Nature Conservancy, and other interested parties to help solve the regional problem of habitat isolation and fragmentation caused by the U.S. 101 and State Route 23 Freeways.

K. Oak and Landmark Trees

Trees provide many benefits to our community. Not only do they provide abundant shade, lower temperatures and filter the air we breathe, but they significantly enhance and beautify the urban landscape. In an open space setting they also provide valuable arboreal habitat for numerous bird species including hawks and owls, all of which increases both the diversity and quality of the natural environment.

Although early explorers noted that one could look across miles of oak studded inland coastal valleys that seemed to have been planted by some master gardener, urbanization of these desirable, easily developable, lowlands and foothills has resulted in major impacts to oak trees. As an example, the majestic Valley Oak, which once commonly existed as very large specimen trees throughout the rolling grasslands of Southern California, is now considered to be threatened within this portion of its range.

Oak trees have long been recognized for their historic and cultural significance to the Conejo Valley, and literally thousands of oak trees have been successfully planted locally since the City's incorporation in 1964. In addition, a comprehensive ordinance regulating the removal and development around oaks was also enacted by the City Council early on, in order to ensure protection of these valuable natural resources as the City developed.

Oak Trees

Valley Oak (*Quercus lobata*): The valley oak is considered the monarch of California oaks. It is the largest and usually lives longest attaining heights of over one hundred feet and can live 400-600 years. The valley oak is characterized by the deeply-lobed, large, gray-green leaves, with the distinctive shape usually associated with oaks. This oak is winter deciduous, which means it sheds its leaves in the fall and comes out in the spring with bright green new leaves. The trunk is dark and coarse. The valley oak, as its name implies, grows naturally in valleys where the soil is deep and rich, shading the undergrowth and creating the oak savannah.

Coast Live Oak (*Quercus agrifolia*): Coast live oaks are the most prevalent oak along the California coast and in coastal valleys, from Mendocino to Baja. These trees, with their dense evergreen-canopy, grow in almost all conditions, from moist streamside to dry hillside. The leaves are small and dark green, and the trunk is smooth and gray. Although they generally do not live as long as valley oaks, they commonly exceed 250 years in age and range from 40-60 feet in height. Due to its adaptability and hardiness, the coast live oak is grown by nurseries for use in the landscape and is a major factor in reforestation, especially in Thousand Oaks.

Scrub Oak (*Quercus dumosa*): Despite its name, the scrub oak is an attractive many-trunked tree growing primarily in the chaparral or woodland hillside plant community. The leaves of the scrub oak are small, green and usually spiny. Trees grow 6-15 feet in height and as wide as they are tall. Characterized by a shrub-like appearance, the dense growth habit of this plant make it excellent for erosion control and wildlife habitat. Although protected by law, scrub oaks are often removed for fire clearance. Fire Protection District regulations allow for selective removal of chaparral plants between oaks resulting in preservation of most of the scrub oaks.

Landmark Trees

In addition to the various species of oak tree for which the Planning Area is noted, several other types of native trees are valued as symbolic of the City's heritage, beauty, and image. These other trees include:

California Sycamore (*Platanus racemosa*): California Sycamore, also called "buttonwood", is a large, strikingly beautiful tree which predominantly occurs in small groupings in open areas and canyons adjacent to stream channels. Because of this association, they often intergrade with other riparian trees such as willow, cottonwood and white alder. Sycamores typically range from 40-60 feet in height with short thick trunks and equally large irregular spreading branches. The deeply cleft leaves are 5-11 inches long and are wide, minutely hairy, and are a light-yellow green. Following pollination, flowers develop into round bristly fruit heads that are brown in color and are shed along with the leaves in late fall.

California bay laurel (*Umbellularia californica*): California bay laurel is an evergreen tree which locally occurs in moist shady canyons and barrancas of the Arroyo Conejo Creek and its tributary drainages. Often found in association with other riparian trees, bay laurels generally vary from 35-60 feet in height and are characterized by straight narrow trunks with wide, rounded, densely foliated canopies. Leaves are shiny, smooth, deep yellow-green, approximately 3-6 inches long. As a rule, the leaves persist on the branches for two seasons or more, after which they are shed allowing for new growth.

California black walnut (*Juglans californica*): The California black walnut is a small multi-trunked tree which occurs sporadically in coastal sage scrub, riparian woodland and southern oak woodland. The tree has long leaves which are divided into leaflets and smooth ashy white bark which becomes blackish brown and deeply furrowed with age. Black walnut trees are considered to be short-lived and generally do not exceed 150 years in age and range from 12 to 30 feet in height. The small, hard-shelled nuts are an important food source for wildlife and were utilized as food and gaming pieces by the Chumash people. Walnut trees brighten up the Conejo Valley when their leaves turn a beautiful golden yellow before they drop in the autumn.

California holly (toyon) (*Heteromeles arbutifolia*): Actually a large evergreen shrub, toyon is famous for its bright red berries. Its supposed similarity to English holly has earned it the common name of California holly and its prevalence in the area gave the town Hollywood its name. It grows throughout California in chaparral and southern oak woodland. Although usually about 15 feet in height, exceptional specimens will reach 25 feet in height. Toyon is available in the horticultural trade and is valuable as a screen, bank planting or for erosion control.

Policy

CO-28 Continue to protect oak and other landmark trees in recognition of their historic, aesthetic and environmental value to the citizens of Thousand Oaks.

Implementation Measures

- To ensure protection of oak trees, continue to implement the City's Oak Tree Ordinance (Section 5-14.01 et. seq. of the Thousand Oaks Municipal Code) and Oak Tree Preservation and Protection Guidelines (Res. 87-93).
- Continue to implement the City's Landmark Tree Ordinance (Section 5-24.01 et. seq. of the Thousand Oaks Municipal Code).
- Where certain species of declining oaks are scheduled for removal, every effort should be made to replace with like trees when possible. In order to offset the continuing decline of Valley Oaks within southern California, the City shall increase the planting ratio of these trees wherever it is determined to be feasible.

L. Wetland and Riparian Areas

The word "riparian" means streamside and refers to the vegetation that grows along the edges of freshwater bodies such as streams, ponds and lakes. Riparian zones are typically characterized by moisture-dependent vegetation such as willows, cottonwoods and mule fat. Typically, riparian woodland comprises an overstory of large trees and an understory of shrubs and herbaceous perennials. Other types of riparian habitats may consist entirely of herbaceous perennials such as sedges and rushes and lack trees and shrubs.

In Thousand Oaks, larger perennial streams such as the Arroyo Conejo, Lang Creek and Lindero Creek support good examples of Riparian Woodland. Smaller tributaries within these watersheds normally contain running water only part of the year and consequently are called intermittent streams. However, even these intermittent streams often retain significant soil moisture and may support riparian vegetation.

Wetland is a more inclusive term than riparian and refers to a vegetated zone that is seasonally or continuously submerged or has more saturated soil conditions. In Thousand Oaks, wetlands may have both riparian and aquatic components and principally occur along larger streams such as the Arroyo Conejo and bodies of water such as Lake Eleanor.

Wetlands and riparian areas constitute an extremely valuable natural resource. They represent essential breeding and foraging habitat for many of the migratory and resident wildlife species found within the Planning Area. Although wetland areas account for only six percent of California's land area, they provide habitat for more than one-third of the State's endangered species. Wetlands and riparian areas support unique plant communities, several of which have been designated as declining throughout the State by the Natural Diversity Data Base. Beyond providing floodwater retention, groundwater recharge, erosion control and water purification, they also provide attractive areas for passive recreation such as hiking, photography and nature study.

Policies

CO-29 Preserve wetlands and associated wetland buffers as open space and maintain these areas in a natural state to protect the community's water quality, wildlife diversity and aesthetic value.

CO-30 Encourage the restoration and enhancement of degraded wetland and riparian habitats in order to preserve and protect native plant and animal species, increase biological diversity and productivity, and maintain permanent access for wildlife to surrounding

open space.

Implementation Measures

- Coordinate with appropriate local, state and federal agencies that protect and preserve wetland resources when designing and reviewing developments that may impact a wetland.
- Educate the public about the importance of keeping pollutants and toxic chemicals out of storm drains that ultimately end up in wetlands.

M. Rare, Threatened or Endangered Species

These are plant and animal species that are considered by State, Federal, or private agencies to exhibit unique biological significance, limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors. Both State and Federal government agencies have developed a rating system to designate the status of sensitive species. These designations, in increasing order of sensitivity, are: "candidate"; "rare"; "threatened"; and "endangered." Official designation of a species in one of these categories affords these species an additional level of protection trying to preserve their existence.

The California Department of Fish and Game (CDFG) has also developed a listing of "species of special concern." Although this designation does not provide additional legal protection, it does indicate concern for the status of species that are experiencing a statewide decline. The known distribution of sensitive plant and animal species is recorded by the CDFG in the Natural Diversity Data Base. In addition to this key information, the CDFG has developed a similar system called the Wildlife Habitat Relationship Data Base to determine the potential for species occurrence based on habitat types.

In addition, the California Native Plant Society (CNPS) maintains an inventory of rare and endangered plants based on information provided by amateur and professional botanists throughout the state. This is the most comprehensive list in existence and it is considered to be authoritative by State and Federal Agencies. CNPS has created four lists in an effort to categorize degrees of concern. Only two of the CNPS lists (List 1B and List 4) are pertinent to this Element of the General Plan.

The plants included in List 1B are rare and endangered throughout their range, are restricted to

California and are eligible for State listing. List 4 is a watch list of plants of limited distribution which, although not rare at present, are uncommon enough that they should be monitored regularly.

Rare, Threatened or Endangered Plants

Several plant species considered to be either threatened, rare or endangered, by the U.S. Fish and Wildlife Service (FWS), the California Department of Fish and Game (CDFG) and the California Native Plant Society (CNPS) occur within the Thousand Oaks Planning Area. Most of these species are protected within the open space system, however, several of them also occur on private land where they are susceptible to disturbance. These species are listed below:

Braunton's milk-vetch (*Astragalus brauntonii*) is a short-lived perennial shrub with lilac flowers. In Thousand Oaks it is associated with sedimentary soils in the North Ranch Open Space, in the vicinity of the Simi Hills. It is listed by CNPS as rare and endangered and is proposed for listing as endangered by the Federal government.

Catalina mariposa lily (*Calochortus catalinae*) is on the CNPS Watch List. This plant is restricted to heavy soils in grassland throughout the Conejo Valley and is threatened by habitat loss due to urbanization.

Plummer's mariposa lily (*Calochortus plummerae*) is an attractive pink and yellow lily that grows in inland sage scrub. In Thousand Oaks, it has only been found in the Los Robles Open Space but it may occur in similar habitat in other areas of the City. Plummer's mariposa lily is listed as rare and endangered by CNPS.

Island mountain mahogany (*Cercocarpus betuloides* var. *blancheae*) has larger leaves than the typical mainland form of this shrub. It is found sparingly in open space south of the Ventura Freeway and is on the CNPS Watch List.

Dune larkspur (*Delphinium parryii* ssp. *blochmaniae*) is a rare white-flowered larkspur which grows in sparse grassland. The only known Conejo Valley location for this plant is in the Lake Eleanor Open Space but it may occur in other parts of the Planning Area as well. Dune larkspur is listed as rare and endangered by CNPS.

Conejo dudleya (*Dudleya abramsii* ssp. *parva*) is a small yellow-flowered succulent which is restricted to north-facing volcanic slopes within the Conejo Valley. It is most common in the vicinity of Mount Clef Ridge. Conejo dudleya is listed as rare and endangered by CNPS and is proposed for listing as threatened by the Federal Government.

Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*) is a small white-flowered succulent which grows on rocky slopes with sparse vegetation. Although its overall distribution is greater than the previous species, it is more restricted in the Conejo Valley and is limited to open space on the western side of the Planning Area. Blochman's dudleya is listed by CNPS as rare and endangered.

Santa Monica Mountains dudleya (*Dudleya cymosa* ssp. *ovatifolia*) is a small succulent with bright yellow flowers which grows on north facing volcanic cliffs. It is closely related to a similar species that grows in the vicinity of Agoura Hills. Within the Conejo Valley it is restricted to the Lake Eleanor Open Space. Santa Monica Mountains dudleya is listed as rare and endangered by CNPS and is proposed for listing as threatened by the Federal Government.

Conejo buckwheat (*Eriogonum crocatum*) is a distinctive yellow flowered shrub with white woolly leaves. It is found on steep north-facing volcanic slopes throughout the Conejo Valley and the western side of Conejo Mountain, but nowhere else on earth. By virtue of its restricted distribution, the City Council has designated it as the official City flower. This species is listed as rare by the State Government and rare and endangered by CNPS.

Santa Susana tarplant (*Hemizonia minthornii*) is a yellow flowered shrub which grows on sandstone bluffs and rocks in the Simi Hills and Santa Susana Mountains. Its occurrence in Thousand Oaks is limited to several small populations in the North Ranch Open Space. Santa Susana tarplant is listed as rare by the State Government and rare and endangered by CNPS.

Southern California black walnut (*Juglans californica* var. *californica*) is found scattered throughout the Conejo Valley in inland sage scrub and oak woodlands. Although relatively common locally, with outstanding examples in the North Ranch Open Space, this small tree has been added to the CNPS Watch List because of its rapid disappearance due to urbanization further south.

Pitcher sage (*Lepechinia fragrans*) occurs widely scattered throughout the chaparral in the Santa Monica Mountains. Found in open space areas south of the freeway, this plant is on the CNPS Watch List because of its limited distribution.

Lyon's Pentachaeta (*Pentachaeta lyonii*) is a small yellow-flowered member of the sunflower family which is limited to approximately a dozen populations in and around the City of Thousand Oaks. It usually inhabits sparsely vegetated grasslands in association with Conejo volcanic soils, but is absent from large areas of seemingly suitable habitat. Large populations of this plant are protected within Wildwood Park and the Lake Eleanor Open Space. Lyon's Pentachaeta is listed by the State as endangered, is proposed for listing as endangered by the Federal Government and

is listed as rare and endangered by CNPS.

Chaparral beargrass (*Nolina cismontana* [*N. parryi*]) has been recently segregated from its more common relative, Parry's beargrass. The Conejo Valley distribution of this plant is limited to the Simi Hills area where it is found in colonial populations from the North Ranch Open Space to the vicinity of Medea Creek in Oak Park. It is listed as rare and endangered by CNPS.

Figure 2 shows the principal locations of rare and endangered plant populations, as described below.

Rare and Endangered Plants Legend for Figure 2

- (1) Plummer's mariposa lily (*Calochortus plummerae*).
- (2) Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*).
- (3) late-flowered mariposa lily (*Calochortus weedii* var. *vestus*); Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*); Conejo buckwheat (*Eriogonum crocatum*).
- (4) Conejo dudleya (*Dudleya abramsii* ssp. *parva*); Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*); Lyon's pentachaeta (*Pentachaeta lyonii*).
- (5) Conejo dudleya (*Dudleya abramsii* ssp. *parva*); Conejo buckwheat (*Eriogonum crocatum*); Lyon's pentachaeta (*Pentachaeta lyonii*).
- (6) Lyon's pentachaeta (*Pentachaeta lyonii*).
- (7) Conejo dudleya (*Dudleya abramsii* ssp. *parva*).
- (8) Conejo dudleya (*Dudleya abramsii* ssp. *parva*); Lyon's pentachaeta (*Pentachaeta lyonii*).
- (9) Conejo dudleya (*Dudleya abramsii* ssp. *parva*); Lyon's pentachaeta (*Pentachaeta lyonii*).
- (10) Conejo dudleya (*Dudleya abramsii* ssp. *parva*).
- (11) Braunton's milkvetch (*Astragalus brauntonii*); dune larkspur (*Delphinium parryi* ssp. *blochmaniae*); Santa Susana tarplant (*Hemizonia minthornii*); chaparral beargrass (*Nolina cismontana*).

- (12) Braunton's milkvetch (*Astragalus brauntonii*).
- (13) Braunton's milkvetch (*Astragalus brauntonii*).
- (14) Braunton's milkvetch (*Astragalus brauntonii*).
- (15) Santa Monica Mountains dudleya (*Dudleya cymosa* ssp. *ovatifolia*); Lyon's pentachaeta (*Pentachaeta lyonii*).
- (16) dune larkspur (*Delphinium parryi* ssp. *blochmaniae*); Santa Monica Mountains dudleya (*Dudleya cymosa* ssp. *ovatifolia*); Conejo buckwheat (*Eriogonum crocatum*); Lyon's pentachaeta (*Pentachaeta lyonii*).
- (17) Lyon's pentachaeta (*Pentachaeta lyonii*).

Rare and Endangered Animal Species

There is only one officially designated rare or endangered animal species which occurs with any regularity within the Conejo Valley.

American peregrine falcon (*Falco peregrinus* ssp. *anatum*) The peregrine falcon is primarily a rare fall transient and winter visitant within the Conejo Valley, although the nearby Santa Monica Mountains provide suitable remote cliffs for nesting. During the 1970's the population of this raptor in California had dropped to about 10 known breeding pairs. Today, as a result of the banning of DDT and intensive recovery efforts, there are in excess of 100 breeding pairs in the State. Loss of habitat, the harmful effects of chlorinated hydrocarbon insecticides and capture of wild birds for falconry have all contributed to the decline of this species in the region. The American peregrine falcon is designated as endangered by both the State and Federal governments.

Sensitive Animal Species

Several sensitive animal species are known to occur within the Planning Area. These are listed as "species of special concern" by the Department of Fish and Game or are candidates for Federal listing. It should be noted that all migratory birds occurring in the United States, including all eagles, hawks and owls are protected by Federal laws. In addition, the golden eagle has legally "fully protected" status under Section 3511 of the State Fish and Game Code. The golden eagle is also protected under the Federal Bald Eagle Act. Status codes are listed below:

CT - State-listed Threatened - Likely to become endangered in the future in the absence of special protection and management.

CP - State Fully Protected - Enacted on a species-by-species basis by the state legislature prior to the adoption of the California Endangered Species Act of 1984.

F1 - Federal Candidate Category 1 - Taxa for which information in the possession of the U.S. Fish and Wildlife Service is sufficient to support a proposal to list the species as Endangered or Threatened.

F2 - Federal Candidate Category 2 - Taxa for which information in the possession of the U.S. Fish and Wildlife Service indicates that proposing to list as threatened or endangered is possibly appropriate, but for which threat and/or distribution data are insufficient to support Federal listing.

CSC - California Species of Special Concern - Animals whose breeding populations in California have declined to the point that they may face extirpation without proper management and recognition in planning.

Santa Monica Mountains hairstreak (*Satyrium auretorum ssp. fumosum*) (F2) This recently described subspecies of a more widespread butterfly is apparently limited in distribution to the northern slopes and plateaus of the western Santa Monica Mountains. Within the Planning Area, it is limited to the open space in the vicinity of Lake Eleanor where the larvae feed on coast live oak. Because of its limited distribution, it is a Category 2 Federal Candidate.

Southwestern pond turtle (*Clemmys marmorata ssp. pallida*) (F1) The southwestern pond turtle is found in the Arroyo Conejo and its perennial tributaries. This thoroughly aquatic turtle requires dense aquatic vegetation and may be seen basking on logs and mud banks. Populations of this species have undergone significant declines due to urbanization and flood control activities and, consequently, it is a Category 1 Federal Candidate.

Coast horned lizard (*Phrynosoma coronatum ssp. frontale*) (F2,CSC) This species is relatively common in the Open Space System wherever its habitat requirements of loose, sandy soil, open areas for sunning and a good supply of its favorite food, harvester ants, are to be found. Within the Planning Area, it is encountered principally in coastal sage scrub and chaparral. It is considered a "species of special concern" by CDFG because it has been reduced in numbers due to destruction of habitat and displacement of native harvester ants by introduced Argentine ants.

Silvery legless lizard (*Anniella pulchra pulchra*) (CSC) The silvery legless lizard is found in coastal sage scrub, oak woodlands and chaparral. In general, the species requires moist alluvial soils with plenty of surface litter and does not occur in heavy clay soil. It is considered a State "species of special concern" because it has been reduced in numbers due to habitat destruction.

(Coastal) Western whiptail (*Cnemidophorus tigris ssp. multiscutatus*) (F2) Within Thousand Oaks, this species is infrequently encountered in chaparral and coastal sage scrub. The coastal race of the western whiptail is considered uncommon over most of its range and consequently it is a Category 2 Federal Candidate.

San Bernardino ringneck snake (*Diadophis punctatus ssp. modestus*) (F2) The ringneck snake is usually encountered in Oak or Riparian Woodland where it hides under rocks and logs. Recent status reports indicate that the species is common but declining in the Santa Monica Mountains and it has been designated a Category 2 Federal Candidate.

Coast patchnose snake (*Salvadora hexalepis ssp. virgultea*) (F2) The patchnose snake is widely distributed, but uncommon, throughout California in predominately arid habitats. It has not been confirmed within the Planning Area but there is suitable habitat in chaparral and canyon bottoms. It has been designated a Category 2 Federal Candidate.

Cooper's hawk (*Accipiter cooperi*) (CSC) The Cooper's hawk is an uncommon year-round resident and fairly common fall transient. It has nested in the Los Robles Open Space and is most often encountered in riparian and oak woodland. Reductions of breeding populations over the last several decades have resulted in its status as a "species of special concern".

Sharp-shinned hawk (*Accipiter striatus*) (CSC) The sharp-shinned hawk is a common fall transient and fairly common winter visitor in chaparral, oak and riparian woodlands in both open space and suburban areas of the Planning Area. Reductions of breeding populations have resulted in its status as a "species of special concern".

Golden eagle (*Aquila chrysaetos*) (CP, CSC) While probably not breeding within the Planning Area, the golden eagle typically forages in grasslands, chaparral and woodlands and is an uncommon resident of the Santa Monica Mountains. This large raptor is a fully protected species and has also been designated a "species of special concern".

Northern harrier (*Circus cyaneus*) (CSC) The northern harrier is a fairly common winter visitor to the area and is usually observed over grasslands and open fields. It has been designated a "species of special concern" because of reductions in the numbers of nesting populations.

Black-shouldered kite (*Elanus caerulea*) (CP) The black-shouldered kite is an uncommon year round resident which frequents open grasslands with scattered trees for perching. This species has undergone major population fluctuations with very low population levels in the earlier part of this century to a peak in the early and mid 1970's. At this point, populations seem to be declining somewhat. This graceful raptor is a fully protected species.

Prairie falcon (*Falco mexicanus*) (CSC) This powerful raptor of open country is a rare winter and casual summer visitor to the Thousand Oaks area. Nesting has been recorded on rocky cliffs in the nearby Santa Monica Mountains and there is suitable potential nesting habitat within the open space system. Recent population declines on the coastal slope have resulted in the prairie falcon being designated a "species of special concern".

Merlin (*Falco columbarius*) (CSC) This small falcon is an uncommon fall transient and rare winter visitor which frequents open woodlands and riparian areas. In the Conejo Valley, merlins are seen occasionally in the winter or as transients in migration. Because of its uncommon status, the merlin has been designated a State "species of special concern".

Burrowing owl (*Athene cunicularia*) (CSC) The burrowing owl is a rare resident in grassland and coastal sage scrub where it utilizes ground squirrel burrows. Although there are several recent records within the open space system, these birds were probably in migration and it is doubtful that they breed in the Planning Area. Because of their scarce and decreasing status in coastal areas of California, the burrowing owl has been designated a "species of special concern".

San Diego (coastal) cactus wren (*Campylorhynchus brunneicapillus ssp. sandiegoense*) (F2, CSC) Although cactus wrens are common in the desert, the coastal race of this bird is extremely localized and declining. Within the Planning Area, it is a resident of coastal sage scrub and grassland where extensive patches of prickly pear and coast cholla cacti provide suitable habitat. Because of its limited distribution in coastal areas, the coastal race of the cactus wren has been designated a "species of special concern" as well as a Category 2 Federal Candidate.

Loggerhead shrike (*Lanius ludovicianus*) (F2, CSC) The loggerhead shrike is an uncommon year-round resident of open grasslands and sparse coastal sage scrub. There is some influx of birds into the area during winter months. Shrikes have declined worldwide due to loss of grassland habitat and consequently it is a State "species of special concern" as well as a Category 2 Federal Candidate.

Yellow warbler (*Dendroica petechia brewsteri*) (CSC) This small songbird is an occasional summer resident and regular spring and fall transient in the Conejo Valley. This species requires tall riparian growth of cottonwoods, alders and willows for breeding. It has undergone significant

population declines due to destruction of riparian vegetation as well as brown cowbird brood parasitism and as a result has been designated a State "species of special concern".

Yellow-breasted chat (*Icteria virens*) (CSC) This large warbler is an uncommon inhabitant of dense riparian vegetation and may occur along the Arroyo Conejo and its principal tributaries. Like the yellow warbler, there has been a notable decline in the number of breeding pairs as a result of destruction of habitat and cowbird brood parasitism. It is a State "species of special concern".

Bell's sage sparrow (*Amphispiza belli ssp. belli*) (F2, CSC) Bell's sage sparrow is an uncommon, local resident of dry chaparral and coastal sage scrub. The species seems to prefer rather monotypic vegetation such as low dense chamise or dry coastal sage scrub for breeding. Because of its uncommon status and limited distribution, the coastal subspecies is a State "species of special concern" and a Category 2 Federal Candidate.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) (F2, CSC) The Southern California rufous-crowned sparrow is a fairly common resident in sparse coastal sage scrub within the Open Space System. It is most frequently encountered on slopes where there is intergrading coastal sage scrub and grassland with rocky outcrops. Because of its uncommon status throughout much of Southern California and its limited distribution, this subspecies is a State "species of special concern" and a Category 2 Federal Candidate.

Bats - Order Chiroptera Several species of bats which have been designated as State "species of special concern" or Category 2 Federal Candidates may occur within the Planning Area. However, the distribution of these species is poorly known, and there is no available information on which to base conclusions about their occurrence within locally.

(San Diego) black-tailed hare (*Lepus californicus ssp bennettii*) (F2, CSC) If present, the black-tailed hare is expected to occur in ecotones between shrub habitats and grasslands. However, there have been few reliable sightings of black-tailed hares within the Conejo Valley in recent years and it may already be extirpated from the area. Because of its diminishing numbers due to habitat destruction and hunting, the black-tailed hare is a State "species of special concern" and a Category 2 Federal Candidate.

(San Diego) desert woodrat (*Neotoma lepida ssp. intermedia*) (F2, CSC) The Conejo Valley is within the range of the desert woodrat which has undergone population reductions due to habitat destruction. This species inhabits a variety of habitats from arid scrub to chaparral, particularly in the vicinity of cliffs and rocky outcrops. The desert woodrat is a State "species of special concern" as well as a Category 2 Federal Candidate.

Ringtail (*Bassariscus astutus*) (CP) This smaller relative of the raccoon is seldom seen because it is totally nocturnal. It is found in the coastal ranges and the Sierra Nevada along the length of the state. It frequents rocky areas and cliffs particularly if there is water nearby. The ringtail is a fully protected species.

American badger (*Taxidea taxus*) (CSC) This large member of the weasel family has been extirpated from many areas of Southern California as a result of habitat loss, deliberate killing, and secondary poisoning. There appears to be a small but stable population of this species within the open space system. Suitable habitat includes grassland, savannah and meadow areas where they prey on gophers, ground squirrels and kangaroo rats. The American badger is a State "species of special concern".

Policies

CO-31 The City shall encourage and promote the preservation and protection of all rare, threatened, endangered or sensitive species listed by State and Federal agencies (United States Fish and Wildlife Service and California Department of Fish and Game), the California Native Plant Society (CNPS) and the City of Thousand Oaks.

Implementation Measures

- As urban development occurs, ensure the protection of populations of rare and endangered species through avoidance as a first priority, utilizing other forms of mitigation only as a last resort.
- Wherever possible, complete ecosystems should be preserved as natural open space in order to avoid the loss of sensitive plant and animal species.
- The Conservation Element includes the official City list of species listed as rare, threatened, endangered or sensitive by State and Federal Agencies, the California Native Plant Society (CNPS) or other knowledgeable experts. This list should be updated periodically.

Section IV - Cultural

N. Archaeological, Historical and Cultural Resources

Archaeological, historical and cultural resources, though not usually natural resources, are important, and their preservation is appropriately addressed in the Conservation Element. These resources represent the history of Thousand Oaks and the Conejo Valley. Ensuring their proper management and protection will contribute to the City's aesthetics, its civic pride and will provide a valuable link between the past and future.

Archaeological Resources

The Conejo Corridor, which includes significant portions of the Planning Area, holds a bountiful legacy of archaeological resources. For over 1,000 years prior to European occupation, the Conejo Corridor was an integral part of a much larger Chumash territory that extended well inland from the coast and channel islands to include all of Santa Barbara, most of Ventura and parts of San Luis Obispo, Kern and Los Angeles counties. Locally, sites related to Late Prehistoric period occupation dating from approximately A.D. 500 to historic contact, yield abundant evidence about the ecological equilibrium which characterized the lifeways of these indigenous native people before the arrival of foreign explorers.

The earliest known inhabitants of this general area of Southern California were transient hunters that arrived sometime around 12,000 B.C. Eventually, they would become the cultural ancestors of the modern Chumash who imprinted the Conejo Corridor with signs of continuous habitation for the past 7,000 years. In particular, the Millingstone (5,500 B.C.-1,500 B.C.) and Intermediate (1,500 B.C.-A.D. 500) periods witnessed year-round, multi-purpose use by a stable resident population estimated to be somewhere in the range of 400-600 people. During these ancient times a number of site types evolved, including permanent villages, semi-permanent seasonal stations, hunting camps and gathering localities focused on plant resources. Typically, people lived in largely open sites along watercourses and also in caves and rock shelters, some of which contained paintings and were used for ceremonial purposes.

As permanent Chumash villages gradually increased in size within the Conejo Corridor, extensive trade networks were established with areas located much further inland and with major coastal villages, especially Mugu and Malibu. This type of interaction not only augmented existing food supplies but provided access to locally unavailable stone and shell materials necessary for the production of durable tools and other implements. Many of these Conejo sites have been systematically investigated over the years and the well preserved artifacts recovered during these

excavations have been analyzed by archaeologists in order to reconstruct many details of daily life, as well as the evolution of long term social patterns. Unusually noteworthy discoveries in recent years include bear bone whistles, flutes made of California condor bones and small stone bowls stained with traces of red pigment.

The City has always taken a pro-active role in the conservation and management of local archaeological resources. Working in cooperation with representatives of the local Native American Indian council, as well as professional archaeological consultants and University staff, a significant number of previously recorded habitation and specialized activity sites have been permanently preserved within the Open Space System. Where preservation has not been possible due to development, or increased susceptibility to vandalism, systematic testing and data recovery procedures have been implemented with the assistance of Native American monitors. Although the majority of cultural resources recovered during the earliest excavations continue to be kept in storage at UCLA, at the request of the local Native American Indian council, several of the more recent artifact collections have been returned to the Conejo Valley for curation and display at the Stagecoach Inn Museum.

Historical Resources

The first Europeans to visit the Conejo Valley were Gaspar de Portola and his expedition in 1769. The Conejo Valley's colorful history of ranching and farming began in 1803, when most of the Valley was included in the Spanish land grant "Rancho el Conejo", after which the Conejo Valley received its name. Ranching included both cattle and sheep, and lasted until well into the 1900's. Farming began on a large scale in the Valley about 1872, when Rancho el Conejo was sold and smaller parcels were rented out for farming. Principal crops included wheat, hay, and barley, with occasional fruit and nut orchards. By 1875, the Conejo Valley was also an important stagecoach stop on the route between Los Angeles and Santa Barbara, with travelers stopping for lunch or overnight stays.

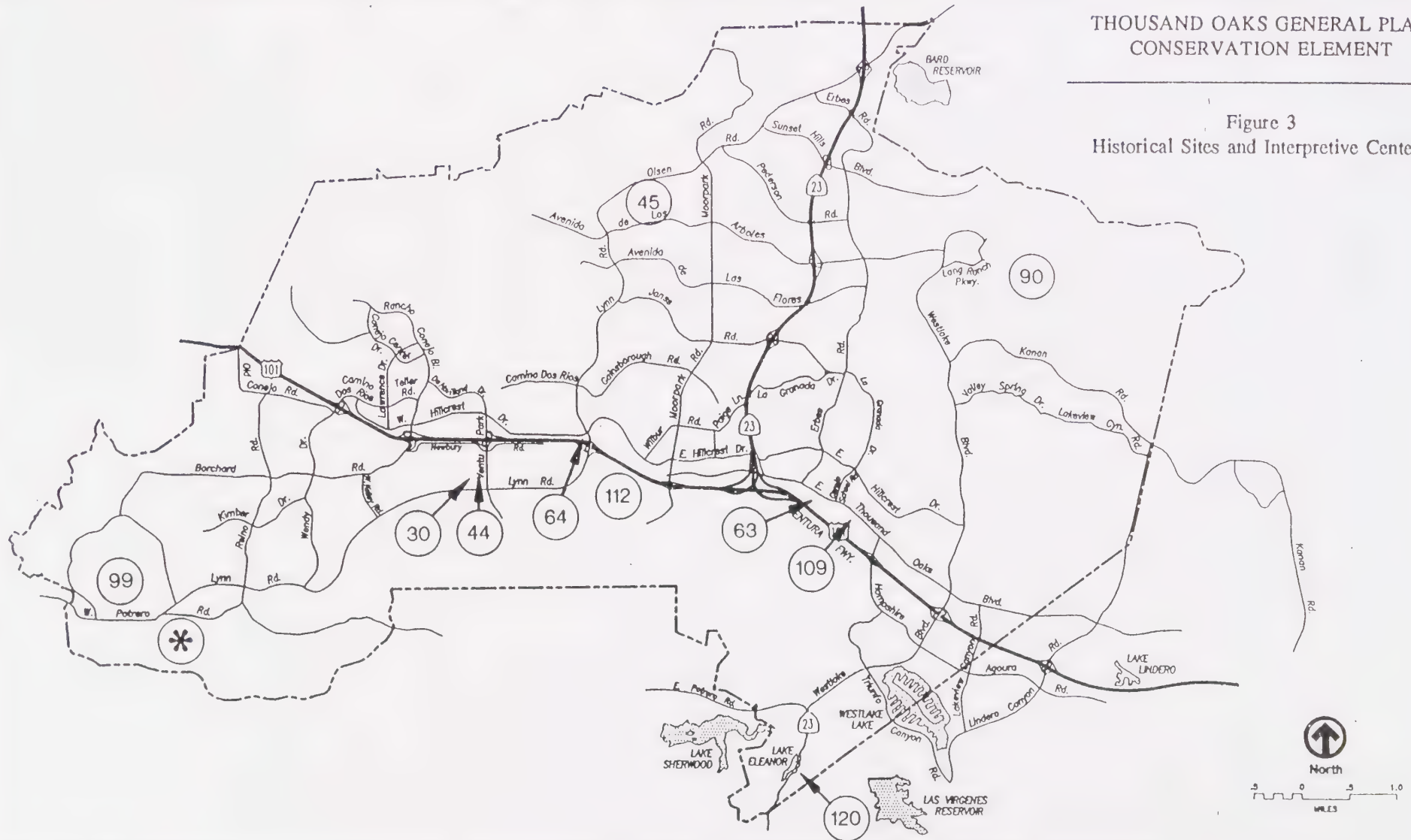
The history of Thousand Oaks is revealed in several historical landmarks and interpretive sites. Currently, historic landmark designations are approved by the City Council based on recommendations made by the Arts Commission. Previously, these designations were made by the Ventura County Cultural Heritage Board and approved by the City Council. Designated County Historical Landmarks and local interpretive sites located within the City's Planning Area boundaries are depicted on Figure 3 and include:

Historical Landmarks

#30: Stagecoach Inn (designated May 1976): Original structure was built 1876, but was destroyed

THOUSAND OAKS GENERAL PLAN
CONSERVATION ELEMENT

Figure 3
Historical Sites and Interpretive Centers



LEGEND

- | | | | |
|----|---|-----|--|
| 30 | Stagecoach Inn | 90 | Oakbrook Regional Park Archaeological Area/Chumash Interpretive Center |
| 44 | Sycamore Tree adjacent to Stagecoach Inn | 99 | Dos Vientos Ranch Buildings |
| 45 | Pederson House and Water Tower | 109 | Crowley House |
| 63 | Jungleland Site | 112 | Janss House |
| 64 | Hunt Olive Tree | 120 | Lake Eleanor Dam |
| * | Rancho Sierra Vista/Satwiwa Native American Indian Culture Center | | |

by fire in the early 1970's. Placed on National Register in December 1975. State Landmark #659. The present location, 51 South Ventu Park Road, is not the original site of the structure, which was located closer to the Ventura Freeway, where a historical marker is placed.

#44: Sycamore Tree (designated June 1978): A very large sycamore tree. Location: Stagecoach Inn.

#45: Pederson House and Water Tower (designated June 1978): Built 1913-14. Shown by appointment. Location: California Lutheran University, Faculty Street.

#63: Jungleland Site (designated March 1981): The original buildings and animal compound were built in the 1920's and later demolished in the mid 1970's. This site is currently occupied by the Thousand Oaks Civic Arts Plaza. Location: Conejo School Road and Thousand Oaks Boulevard.

#64: Hunt Olive Tree (designated January 1982): Location: southwest corner of Hillcrest Drive and Lynn Road.

#90: Oakbrook Regional Park Archaeological Area (designated February 1983): Location: East of Westlake Boulevard.

#99: Dos Vientos Ranch Buildings (designated May 1986): Built c. 1930. Location: West Potrero Road.

#109: Crowley House (designated December 1986): Built 1910. Shown by appointment. Location: 2224 Pleasant Way (next to Parque de la Paz).

#112: Janss House (designated July 1987): Built 1931. 482 Greenmeadow Drive. Currently the location of the Arts Council Center.

#120: Banning Dam (also known as Lake Eleanor Dam, designated May 1988): Built 1889. Location: Eleanor Creek, South Westlake Boulevard.

Interpretive Centers

Stagecoach Inn: Through living history and exhibits, this center describes life in the Conejo Valley in the late 1800's. Permanent exhibits also describe Chumash culture. This site is owned by the Conejo Recreation and Park District and operated by the Conejo Valley Historical Society. The Inn is located at 51 South Ventu Park Road.

Oakbrook Regional Park Chumash Interpretive Center: This interpretive center includes exhibits, special events, and an interpretive trail that describe Chumash life. The Center is owned by the County of Ventura and located on Lang Ranch Parkway.

Rancho Sierra Vista/Satwiwa Native American Indian Culture Center: This site includes special events and exhibits that describe Native American culture and ranching activities in the local area. The site is operated by the National Park Service and located on West Potrero Road.

Policies

CO-32 All information or maps on file with the City pertaining to the location of previously recorded archaeological sites within the Thousand Oaks Planning Area shall remain confidential unless specifically authorized to be released to the public by the local Native American Indian Council.

CO-33 Management of cultural resources such as archaeological sites, historic structures or places shall emphasize resource protection and preservation.

CO-34 The preferred method for preserving any previously recorded archeological site shall be by deed restriction as permanent "open space", in order to prevent any future development or use that might otherwise adversely impact these resources.

CO-35 Decisions pertaining to the disposition of archaeological, historical and cultural resources shall be made in concert with recognized public agencies, groups or individuals having jurisdiction, expertise or interest in these matters, including but not limited to the State Office of Historic Preservation, Thousand Oaks Cultural Heritage Board and local Native American Indian Council, including other designated representatives and affected property owners.

Implementation Measures

- Continue to conduct archaeological field surveys as deemed to be necessary, while utilizing comprehensive resource management procedures to test, salvage, stabilize and store locally excavated artifacts.
- Support the efforts of local citizens, appointed committees or other designated public agencies and private institutions that are working to conserve archaeological and historic resources. Full public discussion shall be encouraged prior to any action being taken.

APPENDIX A

Flora of the Thousand Oaks Planning Area

Flora of the Thousand Oaks Planning Area

Cryptograms - Ferns and Fern Allies

Dryopteridaceae - Wood Fern Family

Dryopteris arguta/ wood fern

Equisetaceae - Horsetail Family

Equisetum arvense/ common horsetail

Polypodiaceae - Polypody Family

Polypodium californicum/ California polypody

Pteridaceae - Brake Family

Adiantum jordanii/ California maidenhair

Cheilanthes newberryi/ Newberry's lace fern

Pellaea andromedifolia/ coffee fern

P. mucronata/ bird's-foot fern

Pentagramma triangularis ssp. *triangularis* [*Pityrogramma t.*]/ goldback fern

Selaginellaceae - Spike-moss Family

Selaginella bigelovii/ Bigelow's spike-moss

Class Dicotyledones (Dicots)

Anacardiaceae - Sumac Family

Malosma laurina/ laurel sumac

Rhus integrifolia/ lemonadeberry

R. ovata/ sugar bush

Schinus molle/ Peruvian pepper tree

Toxicodendron diversilobum/ poison oak

Apiaceae - Carrot Family

Apiastrum angustifolium/ wild celery

Apium graveolens/ celery

Bowlesia incana/ bowlesia

Conium maculatum/ poison hemlock

Daucus pusillus/ rattlesnake weed

Foeniculum vulgare/ fennel

Lomatium dasycarpum/ woolly lomatium

L. utriculatum/ hog fennel

Sanicula arguta/ snake root

- S. crassicaulis*/ Pacific sanicle
- S. tuberosa*/ turkey pea
- Tauschia arguta*/ southern tauschia
- Apocynaceae - Dogbane Family
 - Vinca major*/ greater periwinkle
- Asclepiadaceae - Milkweed Family
 - Asclepias californica*/ California milkweed
 - A. eriocarpa*/ Indian milkweed
 - A. fascicularis*/ narrow-leaf milkweed
- Asteraceae - Sunflower Family
 - Achillea millefolium*/ yarrow
 - Achyrrachaena mollis*/ blow-wives
 - Acourtia microcephala* [*Perezia m.*]/ acourtia
 - Agoseris grandiflora*/ mountain dandelion
 - Ambrosia psilostachya*/ western ragweed
 - Ancistrocarphus filagineus* [*Stylocline f.*]/ woolly fishhooks
 - Anthemis cotula*/ mayweed
 - Artemisia californica*/ California sagebrush
 - A. douglasiana*/ mugwort
 - A. dracunculus*/ tarragon
 - A. subulatus* var. *ligulatus* [*A. exilis*]/ slim aster
 - Baccharis pilularis*/ coyote brush
 - B. salicifolia* [*B. glutinosa*]/ mule fat
 - Bellis perennis*/ English daisy
 - Bidens pilosa* var. *pilosa*/ common beggar-ticks
 - Brickellia californica*/ California brickellbush
 - Carduus pycnocephalus*/ Italian thistle
 - Centaurea melitensis*/ tocalote
 - C. solstitialis*/ yellow star-thistle
 - Chaenactis artemisiifolia*/ white pincushion
 - C. glabriuscula*/ yellow pincushion
 - Chamomilla suaveolens* [*Matricaria matricarioides*]/pineapple weed
 - Cichorium intybus*/ chicory
 - Cirsium occidentale* var. *californicum*/ California thistle
 - C. occidentale* var. *occidentale*/ cobwebby thistle
 - C. vulgare*/ bull thistle
 - Cnicus benedictus*/ blessed thistle
 - Conyza bonariensis*/ little horseweed
 - C. canadensis*/ horseweed

Coreopsis bigelovii/ annual coreopsis
C. gigantea/ giant coreopsis
Cotula australis/ southern cotula
C. coronopifolia/ brass-buttons
Cynara cardunculus/ cardoon
Encelia californica/ California sunflower
Ericameria ericoides [*Haplopappus e. ssp. blakei*]/mock
heather
E. linearifolia [*Haplopappus l.*]/ interior goldenbush
Erigeron foliosus var. *foliosus*/ fleabane aster
Eriophyllum confertiflorum var. *confertiflorum*/ golden-yarrow
Filago californica/ California filago
Gnaphalium bicolor/ two-tone everlasting
G. californicum/ California everlasting
G. canescens ssp. *beneolens* [*Gnaphalium b.*]/fragrant everlasting
G. canescens ssp. *microcephalum* [*G. microcephalum*]/white everlasting
G. ramosissimum/ pink everlasting
Grindelia camporum [*G. robusta*]/ gumplant
Hazardia squarrosa [*Haplopappus s.*]/ saw-toothed goldenbush
Helenium puberulum/ sneezeweed
Helianthus annuus/ annual sunflower
H. gracilentus/ slender sunflower
Hemizonia fasciculata/ tarplant
H. minthornii/ Santa Susana tarplant
Heterotheca grandiflora/ telegraph weed
Hypochaeris glabra/ smooth cat's ear
Isocoma menziesii/ coast goldenbush
Lactuca serriola/ prickly lettuce
Lasthenia californica [*L. chrysostoma*]/ California goldfields
Layia platyglossa/ tidy-tips
Lepidospartum squamatum/ scale-broom
Lessingia filaginifolia [*Corethrogyne f.*]/ California-aster
Madia elegans/ common madia
Malacothrix saxatilis/ cliff-aster
Micropus californicus var. *californicus*/ slender cottonweed
Pentachaeta lyonii/Lyon's pentachaeta
Picris echioides/ bristly ox-tongue
Raffinesquia californica/ California chicory
Senecio flaccidus var. *douglasii* [*S. douglasii* var. *d.*]/ Douglas butterbush

- S. vulgaris*/ common groundsel
- Silybum marianum*/ milk thistle
- Solidago californica*/ California goldenrod
- Sonchus asper*/ prickly sow thistle
- S. oleraceus*/ common sow thistle
- Stephanomeria virgata*/ wand stephanomeria
- Taraxacum officinale*/ dandelion
- Tragopogon porrifolius*/ oyster plant
- Uropappus lindleyi* [*Microseris linearifolia*]/ silver puffs
- Venegasia carpesioides*/ canyon sunflower
- Xanthium spinosum*/ spiny cocklebur
- Betulaceae - Birch Family
 - Alnus rhombifolia*/ white alder
- Boraginaceae - Borage Family
 - Amsinckia menziesii* var *intermedia* [*A. i.*]/ common fiddleneck
 - Cryptantha clevelandii*/ cryptantha
 - C. intermedia*/ large-flowered popcorn flower
 - Heliotropium curassavicum*/ wild heliotrope
 - Pectocarya linearis* ssp. *ferocula*/ slender pectocarya
 - Plagiobothrys nothofulvus*/ popcornflower
- Brassicaceae - Mustard Family
 - Arabis glabra*/ tower mustard
 - Brassica nigra*/ black mustard
 - B. rapa*/ field mustard
 - Capsella bursa-pastoris*/ shepherd's purse
 - Cardamine californica*/ milk maids
 - Descurainia pinnata* ssp. *menziesii*/ tansy mustard
 - Erysimum capitatum*/ western wallflower
 - Hirschfeldia incana* [*Brassica geniculata*]/ Mediterranean mustard
 - Lepidium nitidum*/ shiny peppergrass
 - Lobularia maritima*/ sweet alyssum
 - Raphanus sativus*/ wild radish
 - Rorippa nasturtium-aquaticum*/ water cress
 - Sisymbrium officinale*/ hedge mustard
 - Thysanocarpus curvipes*/ lacepod
 - T. laciniatus*/ fringedpod
- Cactaceae - Cactus Family
 - Opuntia basilaris* var. *basilaris*/ beavertail cactus
 - O. littoralis*/ coastal prickly-pear

- O. oricola*/ prickly pear
- O. prolifera*/ coast cholla
- Capparaceae - Caper Family
 - Isomeris arborea*/ bladderpod
- Caprifoliaceae - Honeysuckle Family
 - Lonicera subspicata* var. *demudata* [*L. s. var johnstonii*]/ chaparral honeysuckle
 - Sambucus mexicana*/ blue elderberry
 - Symphoricarpos mollis*/ snowberry
- Caryophyllaceae - Pink Family
 - Mimuartia douglasii* [*Arenaria d.*]/ Douglas sandwort
 - Silene gallica*/ windmill pink
 - S. laciniata* ssp. *major*/ Indian pink
 - S. verecunda* ssp. *platyota*/ Dolores campion
 - Stellaria media*/ common chickweed
- Chenopodiaceae - Goosefoot Family
 - Atriplex lentiformis*/ quail bush
 - A. semibaccata*/ Australian saltbush
 - Chenopodium album*/ lambs' quarters
 - C. ambrosioides*/ Mexican tea
 - C. californicum*/ California goosefoot
 - C. murale*/ nettle-leaf goosefoot
 - Salsola tragus* [*S. iberica*]/ Russian thistle
- Cistaceae - Rock-rose Family
 - Heleanthemum scoparium*/ peak rush-rose
- Convolvulaceae - Morning-glory Family
 - Calystegia macrostegia*/ chaparral morning-glory
 - Convolvulus arvensis*/ bindweed
- Cornaceae - Dogwood Family
 - Cornus glabrata*/ brown dogwood
- Crassulaceae - Stonecrop Family
 - Crassula connata* [*Tillaea erecta*]/ pygmy-weed
 - Dudleya abramsii* ssp. *parva* [*D. parva*]/ Conejo dudleya
 - D. blochmaniae* ssp. *blochmaniae*/ Blochman's dudleya
 - D. cymosa* ssp. *ovatifolia*/ Santa Monica Mountains dudleya
 - D. lanceolata*/ lance-leaf dudleya
 - D. pulverulenta*/ chalk dudleya
- Cucurbitaceae - Gourd Family
 - Cucurbita foetidissima*/ calabazilla
 - Marah macrocarpus*/ manroot

Cuscutaceae - Dodder Family

Cuscuta californica/ dodder

Ericaceae - Heath Family

Arctostaphylos glandulosa ssp. *mollis*/ Eastwood manzanita

A. glauca/ bigberry manzanita

Euphorbiaceae - Spurge Family

Chamaesyce albomarginata [*Euphorbia a.*]/ rattlesnake weed

Croton californicus/ California croton

Eremocarpus setigerus/ dove weed

Euphorbia cremulata/ Chinese caps

Ricinus communis/ castor bean

Fabaceae - Legume Family

Amorpha californica var. *californica*/ false indigo

Astragalus brauntonii/ Braunton's milkvetch

A. gambelianus/ Gambel's milkvetch

Hoita macrostachya [*Psoralea m.*]/ leather root

Lathyrus vestitus var. *vestitus* [*L. laetiflorus* ssp. *barbarae*]/ chaparral sweet pea

Lotus purshianus/ Spanish clover

L. salsuginosus/ coastal lotus

Lotus scoparius/ deer weed

Lupinus bicolor/ miniature lupine

L. hirsutissimus/ stinging lupine

L. longifolius/ bush lupine

L. succulentus/ arroyo lupine

L. truncatus/ Collar lupine

Medicago polymorpha/ California burclover

Melilotus alba/ white sweetclover

M. indica/ yellow sweetclover

Spartium junceum/ Spanish broom

Trifolium willdenovii [*T. tridentatum*]/ tomcat clover

Vicia spp./ vetch

Fagaceae - Oak Family

Quercus agrifolia/ coast live oak

Q. berberidifolia/ scrub oak

Q. lobata/ valley oak

Gentianaceae - Gentian Family

Centaurium venustum/ canchalagua

Geraniaceae - Geranium Family

Erodium botrys/ long-beaked filaree

- E. cicutarium*/ redstem filaree
- Geranium carolinianum*/ Carolina geranium
- Grossulariaceae - Gooseberry Family
 - Ribes indecorum*/ white flowering currant
 - R. malvaceum*/ chaparral currant
 - R. speciosum*/ fuchsia-flowered gooseberry
- Hydrophyllaceae - Waterleaf Family
 - Emmenanthe penduliflora*/ whispering bells
 - Eriodictyon crassifolium*/ yerba santa
 - Eucrypta chrysanthemifolia*/ eucrypta
 - Nemophila menziesii*/ baby blue-eyes
 - Phacelia cicutaria*/ caterpillar phacelia
 - P. grandiflora*/ giant phacelia
 - P. parryi*/ Parry's phacelia
 - P. ramosissima*/ branching phacelia
 - Pholistoma auritum* var. *auritum*/ fiesta flower
- Juglandaceae - Walnut Family
 - Juglans californica* var. *californica*/ Southern California black walnut
- Lamiaceae - Mint Family
 - Marrubium vulgare*/ horehound
 - Mentha spicata*/ spearmint
 - Salvia apiana*/ white sage
 - S. columbariae*/ chia sage
 - S. leucophylla*/ purple sage
 - S. mellifera*/ black sage
 - S. spathacea*/ hummingbird sage
 - Scutellaria tuberosa*/ scullcap
 - Stachys albens*/ white hedge nettle
 - S. bullata*/ hedge nettle
 - Trichostema lanatum*/ woolly bluecurls
 - T. lanceolatum*/ vinegar weed
- Lauraceae - Laurel Family
 - Umbellularia californica*/ California bay
- Loasaceae - Loasa Family
 - Mentzelia micrantha*/ blazing star
- Lythraceae - Loosestrife Family
 - Lythrum californicum*/ California loosestrife
- Malvaceae - Mallow Family

- Malacothamnus fasciculatus*/ chaparral mallow
- Malva parviflora*/ cheeseweed
- Sidalcea malvaeflora* ssp. *sparsifolia*/ checker bloom
- Myrtaceae - Myrtle Family
 - Eucalyptus globulus*/ blue gum
- Nyctaginaceae - Four O'clock Family
 - Mirabilis californica*/ wishbone bush
- Onagraceae - Evening Primrose Family
 - Camissonia bistorta*/ California sun-cup
 - C. californica*/ mustard primrose
 - C. micrantha*/ small evening primrose
 - Clarkia botatae*/ punch-bowl godetia
 - C. cylindrica*/ speckled clarkia
 - C. epilobioides*/ willow-herb clarkia
 - C. purpurea* ssp. *quadrivulnera*/ purple clarkia
 - C. unguiculata*/ elegant clarkia
 - Epilobium canum* ssp. *canum* [*Zauschneria californica*]/ California fuchsia
 - E. ciliatum* ssp. *ciliatum* [*E. adenocaulon*]/ willow-herb
 - Gaura sinuata*/ wavy-leaved gaura
- Orobanchaceae - Broom-rape Family
 - Orobanche bulbosa*/ chaparral broom-rape
 - O. fasciculata*/ clustered broom-rape
- Oxalidaceae - Oxalis Family
 - Oxalis albicans*/ oxalis
 - O. pes-caprae*/ Bermuda buttercup
- Paeoniaceae - Peony Family
 - Paeonia californica*/ California peony
- Papaveraceae - Poppy Family
 - Dendromecon rigida*/ bush poppy
 - Dicentra ochroleuca*/ creme-flowered ear-drops
 - Eschscholzia californica*/ California poppy
 - Papaver californicum*/ fire poppy
 - Stylomecon heterophylla*/ wind poppy
- Plantaginaceae - Plantain Family
 - Plantago erecta*/ California plantain
 - P. lanceolata*/ English plantain
 - P. major*/ common plantain
- Platanaceae - Sycamore Family
 - Platanus racemosa*/ western sycamore

Polemoniaceae - Phlox Family

- Allophyllum glutinosum*/ stinky gilia
- Eriastrum sapphirinum*/ sapphire wool-star
- Gilia angelensis*/ angel's gilia
- G. capitata* ssp. *abrontanifolia*/ globe gilia
- Leptodactylon californicum*/ prickly phlox
- Linanthus dianthiflorus*/ ground-pink
- L. parviflorus*/ linanthus
- Navarretia hamata*/ hooked navarretia

Polygonaceae - Buckwheat Family

- Chorizanthe staticoides*/ Turkish rugging
- Eriogonum cinereum*/ ashyleaf buckwheat
- E. crocatum*/ Conejo buckwheat
- Eriogonum elongatum* var. *elongatum*/ wand eriogonum
- E. fasciculatum*/ California buckwheat
- Polygonum arenastrum*/ common knotweed
- P. punctatum*/ water smartweed
- Pterostegia drymarioides*/ fairy mist
- Rumex crispus*/ curly dock
- R. salicifolius*/ willow dock

Portulacaceae - Purslane Family

- Calandrinia ciliata*/ red maids
- Calyptridium monandrum*/ sand cress
- Claytonia perfoliata*/ miner's lettuce
- Lewisia rediviva*/ bitter root
- Portulaca oleracea*/ common purslane

Primulaceae - Primrose Family

- Anagallis arvensis*/ scarlet pimpernell
- Dodecatheon clevelandii*/ shooting star

Ranunculaceae - Buttercup Family

- Clematis lasiantha*/ pipestems
- C. ligusticifolia*/ virgin's bower
- Delphinium cardinale*/ scarlet larkspur
- D. parryi* ssp. *blochmaniae*/ Blochman's larkspur
- D. parryi* ssp. *parryi*/ Parry's larkspur
- D. patens*/ spreading larkspur
- Ranunculus californicus*/ California buttercup
- Thalictrum fendleri* var *polycarpum* [*T. polycarpum*]/ meadow-rue

Rhamnaceae - Buckthorn Family

- Ceanothus crassifolius*/ hoaryleaf ceanothus
- C. megacarpus* var. *megacarpus*/ bigpod ceanothus
- C. oliganthus*/ hairy-leaved ceanothus
- C. spinosus*/ greenbark ceanothus
- Rhamnus californica* ssp. *californica*/ California coffeeberry
- Rhamnus crocea*/ redberry
- Rhamnus ilicifolia*/ holly-leaf redberry

Rosaceae - Rose Family

- Adenostoma fasciculatum*/ chamise
- A. sparsifolium*/ red shank
- Cercocarpus betuloides* var. *betuloides*/ birch-leaf mountain-mahogany
- C. betuloides* var. *blanchae*/ island mountain-mahogany
- Heteromeles arbutifolia*/ toyon
- Holodiscus discolor*/ oceanspray
- Potentilla glandulosa* ssp. *glandulosa*/ sticky cinquefoil
- Prunus ilicifolia* ssp. *ilicifolia*/ holly-leaved cherry
- Rosa californica*/ California rose
- Rubus ursinus*/ California blackberry

Rubiaceae - Madder Family

- Galium angustifolium* ssp. *angustifolium*/ narrow-leaved bedstraw
- G. aparine*/ goose grass
- G. nuttallii* ssp. *nuttallii*/ San Diego bedstraw
- Sherardia arvensis*/field madder

Salicaceae - Willow Family

- Populus balsamifera* ssp. *trichocarpa*/ black cottonwood
- P. fremontii* ssp. *fremontii*/ Fremont cottonwood
- Salix exigua*/ narrow-leaved willow
- S. laevigata*/ red willow
- S. lasiolepis*/ arroyo willow

Saxifragaceae - Saxifrage Family

- Lithophragma affine*/ woodland star
- Saxifraga californica*/ California saxifrage

Scrophulariaceae - Figwort Family

- Antirrhinum kelloggii*/ twining snapdragon
- A. multiflorum*/ chaparral snapdragon
- Castilleja affinis*/ coast paintbrush
- C. applegatei* ssp. *martinii*/ Indian paintbrush
- C. exserta* ssp. *exserta* [*Orthocarpus purpurascens*]/ purple owl's clover

- C. foliolosa*/ woolly Indian paintbrush
- Collinsia heterophylla*/ Chinese houses
- Cordylanthus rigidus* ssp. *setigerus* [*C. filifolius*]/ bird's beak
- Keckiella cordifolia*/ heart-leaved penstemon
- Mimulus aurantiacus* [*Diplacus longiflorus*]/ sticky monkeyflower
- M. brevipes*/ yellow monkeyflower
- M. cardinalis*/ scarlet monkeyflower
- M. guttatus*/ common monkeyflower
- Pedicularis densiflora*/ Indian warrior
- Penstemon cetranthifolius*/ scarlet bugler
- P. heterophyllus* ssp. *australis*/ foothill penstemon
- Scrophularia californica*/ California figwort
- Veronica anagallis-aquatica*/ water speedwell
- Solanaceae - Nightshade Family
 - Datura wrightii* [*D. meteloides*]/ Jimson weed
 - Nicotiana clevelandii*/ Indian tobacco
 - N. glauca*/ tree tobacco
 - Solanum americanum* [*S. nodiflorum*]/ little white nightshade
 - S. douglasii*/ Douglas nightshade
 - S. xanti*/ chaparral nightshade
- Urticaceae - Nettle Family
 - Hesperocnide tenella*/ western nettle
 - Parietaria hespera* [*P. floridana*]/ pellitory
 - Urtica dioica* ssp. *holosericea* [*U. holosericea*]/stinging nettle
 - Urtica urens*/ dwarf nettle
- Verbenaceae - Vervain Family
 - Phyla lanceolata* [*Lippia l.*]/ frog fruit
 - P. nodiflora* var. *nodiflora* [*Lippia n. var. rosea*]/ garden lippia
 - Verbena lasiostachys*/ common vervain
- Violaceae - Violet Family
 - Viola pedunculata*/ Johnny-Jump-Up
- Viscaceae - Mistletoe Family
 - Phoradendron macrophyllum*/ big leaf mistletoe
 - P. villosum*/ oak mistletoe
- Zygophyllaceae - Caltrop Family
 - Tribulus terrestris*/ puncture vine

Class Monocotyledones (Monocots)

Alismataceae - Water-Plantain Family

Alisma plantago-aquatica [*A. triviale*]/ water plantain

Echinodorus berteroi/ burhead

Cyperaceae - Sedge Family

Carex barbarae/ sedge

C. praegracilis/ sedge

C. senta/ sedge

Cyperus involucratus [*C. alternifolius*]/ umbrella-sedge

C. erythrorhizos/ umbrella-sedge

Eleocharis macrostachya/ common spikerush

E. montevidensis/ spikerush

Scirpus acutus var. *occidentalis*/ common tule

S. americanus [*S. olneyi*]/ three square

S. californicus/ California bulrush

Iridaceae - Iris Family

Sisyrinchium bellum/ blue-eyed-grass

Juncaceae - Rush Family

Juncus balticus/ wire rush

J. bufonius/ toad rush

J. macrophyllus/ long-leaved rush

J. textilis/ textile rush

J. xiphioides/ iris-leaved rush

Lemnaceae - Duckweed Family

Lemna sp./ duckweed

Liliaceae - Lily Family

Allium haematochiton/ red-skinned onion

A. peninsulare var. *peninsulare*/ peninsular onion

Bloomeria crocea/ common goldenstar

Brodiaea jolonensis/ harvest brodiaea

Calochortus albus/ fairy lantern

C. catalinae/ Catalina mariposa lily

C. clavatus ssp. *pallidus*/ yellow mariposa lily

C. plummerae/ Plummer's mariposa lily

C. venustus/ butterfly mariposa lily

Chlorogalum pomeridianum var. *pomeridianum*/ soap plant

Dichelostemma capitatum ssp. *capitatum* [*D. pulchella*]/ blue dicks

Fritillaria biflora/ chocolate lily

- Lilium humboldtii* ssp *ocellatum*/ ocellated lily
- Muilla maritima*/ common muilla
- - *Nolina cismontana*/ chaparral beargrass
- Yucca whipplei*/ our Lord's candle
- Zigadenus fremontii*/ chaparral star-lily
- Orchidaceae - Orchid Family
 - Epipactis gigantea*/ stream orchid
 - Piperia unalascensis*/ rein orchid
- Poaceae - Grass Family
 - Achnatherum coronatum* [*Stipa c.*]/ giant needlegrass
 - Agrostis stolonifera*/ creeping bent
 - A. viridis* [*A. semiverticillata*]/ bent grass
 - Arundo donax*/ giant reed
 - Avena barbata*/ slender wild oat
 - A. fatua*/ wild oat
 - Briza minor*/ little quaking grass
 - Bromus carinatus*/ California brome
 - B. diandrus*/ ripgut grass
 - B. hordeaceus* [*B. mollis*]/ soft chess
 - B. madritensis* ssp. *rubens* [*B. rubens*]/ red brome
 - B. tectorum*/ cheat grass
 - Cortaderia atacamensis*/ pampasgrass
 - Crypsis schoenoides*/ swamp grass
 - Cynodon dactylon*/ Bermuda grass
 - Elymus glaucus*/ blue wildrye
 - Ehrharta erecta*/ Veldt grass
 - Eragrostis hypnoides*/ teal lovegrass
 - Gastridium ventricosum*/ nit grass
 - Hordeum intercedens*/ little barley
 - H. marimum* ssp. *leporinum* [*H. leporinum*]/ Mediterranean barley
 - Koeleria macrantha*/ junegrass
 - Lamarckia aurea*/ goldentop
 - Leptochloa uninervia*/ Mexican sprangletop
 - Leymus condensatus* [*Elymus c.*]/ giant wild rye
 - Lolium multiflorum*/ Italian ryegrass
 - Melica imperfecta*/ coast range melic
 - Muhlenbergia microsperma*/ littleseed muhly
 - M. rigens*/ deergrass
 - Nassella cernua* [*Stipa c.*]/ nodding needlegrass

- N. lepida* [*Stipa l.*]/ foothill needlegrass
- N. pulchra* [*Stipa p.*]/ purple needlegrass
- Oryzopsis miliacea*/ smilo grass
- Pennisetum clandestinum*/ kikuyu grass
- P. setaceum*/ fountain grass
- Phalaris aquatica*/ Harding grass
- Poa secunda* ssp *secunda* [*P. scabrella*]/ one-sided bluegrass
- Polypogon interruptus*/ ditch beard grass
- P. monspeliensis*/ rabbitsfoot grass
- Schismus arabicus*/ Mediterranean grass
- Vulpia myuros* var. *hirsuta* [*Festuca megalura*]/ foxtail fescue
- Typhaceae - Cattail Family
 - Typha domingensis*/ Southern cattail
 - T. latifolia*/ broad-leaved cattail
- Zannichelliaceae - Horned-Pondweed Family
 - Zannichellia pallustris*/ grass-wrack

APPENDIX B

Reptiles and Amphibians of the Thousand Oaks Planning Area

Reptiles and Amphibians of the Thousand Oaks Planning Area

- Family Plethodontidae - Lungless Salamanders
 - black-bellied salamander (*Batrachoseps nigriventris*)
 - ensatina salamander (*Ensatina eschscholtzi* ssp. *eschscholtzi*)
- Family Bufonidae - True Toads
 - California toad (*Bufo boreas* ssp. *halophilus*)
- Family Hylidae - Tree Frogs and Allies
 - California treefrog (*Hyla cadaverina*)
 - Pacific treefrog (*Hyla regilla*)
- Family Ranidae - True Frogs
 - bullfrog (*Rana catesbeiana*)
- Family Testudinidae - Water and Box Turtles
 - southwestern pond turtle (*Clemmys marmorata* ssp. *pallida*)
 - red-eared slider (*Pseudemys scripta* ssp. *elegans*)
- Family Iguanidae - Iguanid Lizards
 - western fence lizard (*Sceloporus occidentalis*)
 - coast horned lizard (*Phrynosoma coronatum* ssp. *frontale*)
 - California side blotched lizard (*Uta stansburiana* ssp. *hesperis*)
- Family Scincidae - Skinks
 - western skink (*Eumeces skiltonianus* ssp. *skiltonianus*)
- Family Anguidae - Alligator Lizards and Allies
 - southern alligator lizard (*Gerrhonotus multicarinatus* ssp. *webbi*)
- Family Teiidae - Whiptail Lizards and Allies
 - coastal whiptail lizard (*Cnemidophorus tigris* ssp. *multiscutatus*)
- Family Anniellidae - California Legless Lizards
 - silvery legless lizard (*Anniella pulchra* ssp. *pulchra*)
- Family Colubridae - Colubrid Snakes
 - ringneck snake (*Diadophis punctatus* ssp. *modestus*)
 - western yellowbelly racer (*Coluber constrictor* ssp. *mormon*)
 - striped racer (*Masticophis lateralis* ssp. *lateralis*)
 - red coachwhip (*Masticophis flagellum* ssp. *piceus*)
 - gopher snake (*Pituophis melanoleucus* ssp. *annectens*)
 - California kingsnake (*Lampropeltis getulus* ssp. *californiae*)
 - two-striped gartersnake (*Thamnophis hammondi* ssp. *hammondi*)
 - western black-headed snake (*Tantilla planiceps*)
 - California lyre snake (*Trimorphodon biscutatus* ssp. *vandenburghi*)
 - night snake (*Hypsiglena torquata* ssp. *klauberi*)

Family Viperidae - Rattlesnakes and Allies

Southern Pacific rattlesnake (*Crotalus viridis ssp. helleri*)

APPENDIX C

Birds of the Thousand Oaks Planning Area

Birds of the Thousand Oaks Planning Area

Family Podicipedidae: Grebes

- - pied-billed grebe (*Podilymbus podiceps*)
- eared grebe (*Podiceps nigricollis*)

Family Phalacrocoracidae: Cormorants

- double-crested cormorant (*Phalacrocorax auritus*)

Family Ardeidae: Herons, egrets etc.

- American bittern (*Botaurus lentiginosus*)
- great blue heron (*Ardea herodias*)
- great egret (*Casmerodius albus*)
- snowy egret (*Egretta thula*)
- cattle egret (*Bubulcus ibis*)
- green heron (*Butorides striatus*)
- black-crowned night-heron (*Nycticorax nycticorax*)

Family Anatidae: Ducks, geese etc.

- Canada goose (*Branta canadensis*)
- wood duck (*Aix sponsa*)
- American wigeon (*Anas americana*)
- gadwall (*Anas strepera*)
- green-winged teal (*Anas crecca*)
- mallard (*Anas platyrhynchos*)
- common pintail (*Anas acuta*)
- blue-winged teal (*Anas discors*)
- cinnamon teal (*Anas cyanoptera*)
- northern shoveler (*Anas clypeata*)
- canvasback (*Aythya valisineria*)
- redhead (*Aythya americana*)
- ring-necked duck (*Aythya collaris*)
- lesser scaup (*Aythya affinis*)
- bufflehead (*Bucephala albeola*)
- ruddy duck (*Oxyura jamaicensis*)

Family Cathartidae: New World Vultures

- turkey vulture (*Cathartes aura*)

Family Accipitridae: Eagles, hawks, kites

- osprey (*Pandion haliaetus*)
- white-tailed kite (*Elanus caeruleus*)
- northern harrier (*Circus cyaneus*)
- sharp-shinned hawk (*Accipiter striatus*)
- Cooper's hawk (*Accipiter cooperii*)

- red-shouldered hawk (*Buteo lineatus*)
- red-tailed hawk (*Buteo jamaicensis*)
- golden eagle (*Aquila chrysaetos*)
- Family Falconidae: Falcons, caracaras
 - American kestrel (*Falco sparverius*)
 - merlin (*Falco columbarius*)
 - peregrine falcon (*Falco peregrinus*)
 - prairie falcon (*Falco mexicanus*)
- Family Phasianidae: Quails, pheasants etc.
 - California quail (*Callipepla californica*)
- Family Rallidae: Rails, gallinules and coots
 - Virginia rail (*Rallus limicola*)
 - sora (*Porzana carolina*)
 - American coot (*Fulica americana*)
- Family Charadriidae: Plovers etc.
 - killdeer (*Charadrius vociferus*)
- Family Scolopacidae: Sandpipers
 - greater yellowlegs (*Tringa melanoleuca*)
 - spotted sandpiper (*Actitis macularia*)
 - long-billed dowitcher (*Limnodromus scolopaceus*)
 - common snipe (*Gallinago gallinago*)
- Family Laridae: Gulls, etc.
 - ring-billed gull (*Larus delawarensis*)
 - California gull (*Larus californicus*)
- Family Columbidae: Pigeons, doves etc.
 - band-tailed pigeon (*Columba fasciata*)
 - rock dove (*Columba livia*)
 - mourning dove (*Zenaida macroura*)
 - spotted dove (*Streptopelia chinensis*)
 - common ground dove (*Columbina passerina*)
- Family Cuculidae: Cuckoos etc.
 - greater roadrunner (*Geococcyx californianus*)
- Family Tytonidae: Barn-owls
 - common barn-owl (*Tyto alba*)
- Family Strigidae: Typical Owls
 - great horned owl (*Bubo virginianus*)
 - western screech owl (*Otus kennicottii*)
 - burrowing owl (*Speotyto cunicularia*)
 - short-eared owl (*Asio flammeus*)

- Family Caprimulgidae: Nightjars etc.
 - common poorwill (*Phalaenoptilus nuttallii*)
- Family Apodidae: Swifts
 - Vaux's swift (*Chaetura vauxi*)
 - white-throated swift (*Aeronautes saxatalis*)
- Family Trochilidae: Hummingbirds
 - black-chinned hummingbird (*Archilochus alexandri*)
 - Anna's hummingbird (*Calypte anna*)
 - Costa's hummingbird (*Calypte costae*)
 - rufous hummingbird (*Selasphorus rufus*)
 - Allen's hummingbird (*Selasphorus salis*)
- Family Alcedinidae: Kingfishers
 - belted kingfisher (*Ceryle alcyon*)
- Family Picidae: Woodpeckers, etc.
 - Lewis woodpecker (*Melanerpes lewis*)
 - acorn woodpecker (*Melanerpes formicivorus*)
 - downy woodpecker (*Picoides pubescens*)
 - Nuttall's woodpecker (*Picoides nuttallii*)
 - red-breasted sapsucker (*Sphyrapicus ruber*)
 - northern flicker (*Colaptes auratus*)
- Family Tyrannidae: Tyrant flycatchers
 - Pacific-slope flycatcher (*Empidonax difficilis*)
 - ash-throated flycatcher (*Myiarchus cinerascens*)
 - western wood peewee (*Contopus sordidulus*)
 - Cassin's kingbird (*Tyrannus vociferans*)
 - western kingbird (*Tyrannus verticalis*)
 - black phoebe (*Sayornis nigricans*)
 - Say's phoebe (*Sayornis saya*)
- Family Alaudidae: Larks
 - horned lark (*Eremophila alpestris*)
- Family Hirundinidae: Swallows
 - barn swallow (*Hirundo rustica*)
 - cliff swallow (*Hirundo pyrrhonata*)
 - tree swallow (*Tachycineta bicolor*)
 - violet-green swallow (*Tachycineta thalassina*)
 - rough-winged swallow (*Stelgidopteryx ruficollis*)
- Family Corvidae: Crows, magpies, jays, etc.
 - scrub jay (*Aphelocoma coerulescens*)
 - American crow (*Corvus brachyrhynchos*)
 - common raven (*Corvus corvax*)

- Family Paridae: Titmice
 - plain titmouse (*Parus inornatus*)
- Family Aegithalidae: Bushtits
 - bushtit (*Psaltiriparus minimus*)
- Family Sittidae: Nuthatches
 - white-breasted nuthatch (*Sitta carolinensis*)
- Family Certhiidae: Creepers
 - brown creeper (*Certhia familiaris*)
- Family Troglodytidae: Wrens
 - cactus wren (*Campylorhynchus brunneicapillus*)
 - house wren (*Troglodytes aedon*)
 - Bewick's wren (*Thryomanes bewickii*)
 - rock wren (*Salpinctes obsoletus*)
 - canyon wren (*Catherpes mexicanus*)
 - marsh wren (*Cistothorus palustris*)
- Family Muscicapidae: Old World Warblers, Thrushes, and Wrentits
 - wrentit (*Chamaea fasciata*)
 - western bluebird (*Sialia mexicana*)
 - Swainson's thrush (*Catharus ustulatus*)
 - hermit thrush (*Catharus guttatus*)
 - American robin (*Turdus migratorius*)
 - golden-crowned kinglet (*Regulus satrapa*)
 - ruby-crowned kinglet (*Regulus calendula*)
 - blue-gray gnatcatcher (*Polioptila caerulea*)
- Family Mimidae: Mockingbirds, thrashers
 - northern mockingbird (*Mimus polyglottos*)
 - California thrasher (*Toxostoma redivivum*)
- Family Motacillidae: Pipits, wagtails
 - American pipit (*Anthus rubescens*)
- Family Bombycillidae: Waxwings
 - cedar waxwing (*Bombycilla cedrorum*)
- Family Ptilonotidae: Silky flycatchers
 - phainopepla (*Phainopepla nitens*)
- Family Laniidae: Shrikes
 - loggerhead shrike (*Lanius ludovicianus*)
- Family Sturnidae: Starlings
 - European starling (*Sturnus vulgaris*)
- Family Vireonidae: Vireos
 - solitary vireo (*Vireo solitarius*)
 - Hutton's vireo (*Vireo huttoni*)

warbling vireo (*Vireo gilvus*)

Family Emberizidae: Wood warblers, Tanagers, Grosbeaks, Sparrows, and Blackbirds

common yellowthroat (*Geothlypis trichasera*)

yellow-rumped warbler (*Dendroica coronata*)

yellow warbler (*Dendroica petechia*)

black-throated gray warbler (*Dendroica nigrescens*)

Townsend's warbler (*Dendroica townsendi*)

orange-crowned warbler (*Vermivora celata*)

Nashville warbler (*Vermivora ruficapilla*)

MacGillivray's warbler (*Oporornis tolmiei*)

Wilson's warbler (*Wilsonia pusilla*)

yellow-breasted chat (*Icteria virens*)

western tanager (*Piranga ludoviciana*)

blue grosbeak (*Guiraca caerulea*)

black-headed grosbeak (*Pheucticus melanocephalus*)

lazuli bunting (*Passerina amoena*)

rufous-sided towhee (*Pipilo erythrophthalmus*)

California towhee (*Pipilo crissalis*)

rufous-crowned sparrow (*Aimophila ruficeps*)

chipping sparrow (*Spizella passerina*)

lark sparrow (*Chondestes grammacus*)

sage sparrow (*Amphispiza belli*)

savannah sparrow (*Passerculus sandwichensis*)

grasshopper sparrow (*Ammodramus savannarum*)

fox sparrow (*Passerella iliaca*)

song sparrow (*Melospiza melodia*)

Lincoln's sparrow (*Melospiza lincolni*)

golden-crowned sparrow (*Zonotrichia atricapilla*)

white-crowned sparrow (*Zonotrichia leucophrys*)

dark-eyed junco (*Junco hyemalis*)

red-winged blackbird (*Agelaius phoeniceus*)

western meadowlark (*Sturnella neglecta*)

Brewer's blackbird (*Euphagus cyanocephalus*)

brown-headed cowbird (*Molothrus ater*)

hooded oriole (*Icterus cucullatus*)

northern oriole (*Icterus galbula*)

Family Fringillidae: Carduelin finches

purple finch (*Carpodacus purpureus*)

house finch (*Carpodacus mexicanus*)

pine siskin (*Carduelis pinus*)

lesser goldfinch (*Carduelis psaltria*)

Lawrence's goldfinch (*Carduelis lawrencei*)

American goldfinch (*Carduelis tristis*)

Family Passeridae: Old World Sparrows

house sparrow (*Passer domesticus*)

APPENDIX D

Mammals of the Thousand Oaks Planning Area

Mammals of the Thousand Oaks Planning Area

Order Marsupialia

Family Didelphidae

opossum (*Didelphis marsupialis*)

Order Insectivora

Family Soricidae

ornate shrew (*Sorex ornatus*)

Family Talpidae

broad-handed mole (*Scapanus latimanus*)

Order Chiroptera

Family Vespertilionidae

fringed myotis (*Myotis thysanodes*)

California myotis (*Myotis californicus*)

Yuma myotis (*Myotis yumanensis*)

western pipistrelle (*Pipistrellus hesperus*)

red bat (*Lasiurus borealis*)

hoary bat (*Lasiurus cinereus*)

big brown bat (*Eptesicus fuscus*)

lump-nosed bat (*Plecotus townsendii*)

pallid bat (*Antrozous pallidus*)

Family Molossidae

Brazilian free-tailed bat (*Tadarida brasiliensis*)

western mastiff bat (*Eumops perotis*)

Order Lagomorpha

Family Leporidae

desert cottontail (*Sylvilagus auduboni*)

brush rabbit (*Sylvilagus bachmani*)

Order Rodentia

Family Sciuridae

California ground squirrel (*Spermophilus beecheyi*)

western gray squirrel (*Sciurus griseus*)

fox squirrel (*Sciurus niger*)

Family Geomyidae

Botta's pocket gopher (*Thomomys bottae*)

Family Heteromyidae

California pocket mouse (*Perognathus californicus*)

Pacific kangaroo rat (*Dipodomys agilis*)

Family Cricetidae

western harvest mouse (*Reithrodontomys megalotis*)

- deer mouse (*Peromyscus spp.*)
- dusky-footed woodrat (*Neotoma fuscipes ssp. macrotis*)
- San Diego desert woodrat (*Neotoma lepida ssp. intermedia*)
- California meadow mouse (*Microtus californicus*)

Family Muridae

- Norway rat (*Rattus norvegicus*)
- black rat (*Rattus rattus*)
- house mouse (*Mus musculus*)

Order Carnivora

Family Canidae

- coyote (*Canis latrans*)
- gray fox (*Urocyon cinereoargenteus*)

Family Procyonidae

- ringtail (*Bassariscus astutus*)
- raccoon (*Procyon lotor*)

Family Mustelidae

- long-tailed weasel (*Mustela frenata*)
- striped skunk (*Mephitis mephitis*)
- badger (*Taxidea taxus*)

Family Felidae

- mountain lion (*Felis concolor*)
- bobcat (*Lynx rufus*)

Order Artiodactyla

Family Cervidae

- mule deer (*Odocoileus hemionus ssp. hemionus*)

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